

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

280.39
M34Am
Copy 2

MARKETING INFORMATION
PRESSED COSTS
SHRINKAGE CONVERSION TABLES

LIVESTOCK MARKETING HANDBOOK



AUG 7 '78

U.S. DEPT. OF AGRICULTURE
NAT'L. AGRIC. LIBRARY
RECEIVED

PRODUCTION SECTION
LIBRARY SERIALS DIVISION

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
WASHINGTON, D.C.

CONTENTS

| | |
|------------------------------------------------------|----|
| Introduction | 1 |
| Types of Market Reports Issued . . . | 2 |
| Directory of Market News Offices . . | 5 |
| Instant Market News Telephone Numbers | 8 |
| Know Your Grades | 10 |
| Feeder Steers (Calves) U.S. Grades . | 11 |
| Slaughter Steers U.S. Grades (Quality) | 12 |
| Slaughter Steers U.S. Grades (Yield) | 14 |
| Dressed Cost Tables | 16 |
| Shrinkage Conversion Tables | 40 |
| Beef Carcass Data Service | 48 |
| Glossary of Livestock Market News Terms | 51 |

INTRODUCTION

In recent years, the production and marketing of livestock have become more and more complex. From the standpoint of net returns to stockmen, marketing decisions are just as important as the ability to feed, fatten, and care for livestock.

In view of the significant changes in the marketing of livestock and livestock products, producers and feeders are finding it to their advantage to have as much reliable market information as possible. In addition to information on prices and supply, there is a need for general information on usual shrinkage costs and yield data. This handbook provides that information.

Also presented in this handbook are: types of USDA livestock market reports released, a directory of USDA and Federal-State Livestock Market News offices, a list of instant Market News telephone numbers, illustrations of U.S. grades of slaughter and feeder cattle, information on USDA's Beef Carcass Data Service, and a glossary of Livestock Market News terms.

TYPES OF MARKET REPORTS ISSUED

Public Market Reports

Daily reports are available from 19 terminal markets. At the larger markets, an early morning flash, a midsession report, and a closing report are issued each day. Early morning flashes generally describe the day's supply, the opening market trend, and prices for early sales. Midsession reports include receipts, price trends, and quotations for the bulk of the day's sales. The closing report lists any late changes. These reports cover both private treaty sales and auction sales at these markets.

At some of the smaller markets, only one or two reports are issued daily, depending on the volume of trading. Weekly reports are issued for each class of livestock available.

Federal-State reporters also cover sales in about 300 auction markets and issue local reports on each sale. Summarized reports of auction sales are issued from central market news offices on a statewide or area basis.

Reports of Direct Sales

Direct sales of slaughter and feeder cattle, hogs, and sheep are reported from 26 major marketing areas on a daily, semiweekly, or weekly basis—depending on trading volume. These reports cover both current and contract sales in most Western States, plus many Southern and Midwestern States.

Meat Reports

Sales of carcass meat and primal wholesale cuts are reported daily from trading in Denver, the Midwest, the east and west coasts, Texas and western Kansas. Reports cover major producing and consuming areas.

A series of daily reports cover sales of fabricated cuts of beef (wholesale and oven-ready cuts prepared by the packer) in five locations: Los Angeles, San Francisco, Amarillo, the Midwest, and the east coast. Daily reports are based on standard meat cuts sold in this manner.

Wool Reports

Weekly wool price reports for both U.S. and foreign sales are issued from Denver, Colorado.

Other Reports

Offal—Sales of offal products are reported weekly for three locations: west coast, central, and east coast.

Slaughter Estimates—An estimate of the current day's total U.S. federally inspected slaughter for cattle, hogs and sheep is released from Washington at approximately 2:30 p.m., Eastern time.

Meat Production—An estimate of the current week's meat production is released each Friday at 4 to 4:30 p.m., Eastern time.

Pork Cut-Out Data—The combined value of pork cuts, Iowa and River market basis, from

hog carcasses weighing 150 and 180 pounds for Grades 1 through 4 is released daily at 4 p.m., Eastern time.

Beef Cut-Out Data—Gross cut-out value of Choice 3 600-700 pound beef carcasses based on carlot prices of Choice fabricated beef cuts, is released daily at 4:45 p.m., Eastern time.

Dissemination of Market Reports

Information gathered by livestock, meat, and wool reports is quickly assembled into easily read reports, which are released to the public through commercial news media. This information is also flashed from coast to coast over USDA's leased wire teletypewriter system interconnecting all reporting offices.

Reports are available free to radio and television stations, newspapers, and trade journals from coast to coast. In addition, weekly mimeographed reports are mailed to persons in all parts of the country and several foreign countries. Bulletin boards in trading centers and markets also carry current market information provided by Federal-State reporters.

Automatic telephone answering devices rapidly relay livestock market information to interested callers. A person can dial one of the special numbers listed on page..... to hear a regularly updated recording of the latest market information. This service is available 24 hours a day.

DIRECTORY OF MARKET NEWS OFFICES

| Office | Address | Zip Code | Phone Number |
|--------------------|-------------------------------------------------------------|----------|--------------|
| Albany, NY | Dept. of Agr. & Mkts., Bldg. 8, State Campus | 12226 | 518-457-3962 |
| Amarillo, TX | P.O. Box 30217 | 79105 | 806-372-6361 |
| Austin, TX | P.O. Box 12847, Capitol Station | 78711 | 512-475-2744 |
| Baltimore, MD | Route 40 West, Balto, LS Exch., West Friendship, Md. | 21794 | 301-442-2167 |
| Billings, MT | P.O. Box 1191 | 59103 | 406-657-6285 |
| Clovis, NM | P.O. Box 158 | 88101 | 505-762-2961 |
| Columbia, SC | South Carolina Dept. of Agr., P.O. Box 13405 | 29201 | 803-758-8103 |
| Columbus, OH | 710 State Office Building, 65 South Front Street | 43215 | 614-466-2298 |
| Denver, CO | Denver Fed. Ctr. Wool & Mohair Lab., Bldg. 81, Box 25125 | 80225 | 303-234-4890 |
| Des Moines, IA | Rm. 767, Fed. Bldg., Box 06, 210 Walnut St. | 50309 | 515-284-4460 |
| Dodge City, KS | Box 1343 | 67801 | 316-227-8881 |
| El Centro, CA | Fed.-St. MN Serv., P.O. Box 675, 395 Broadway St. | 92243 | 714-352-7621 |
| Evansville, IN | Union Stk. Yds., 103 W Louisiana St. | 47707 | 812-335-6242 |
| Fort Smith, AR | Ft. Smith Stk. Yds., Rt. 4, Box 10 | 72901 | 918-875-3211 |
| Fort Worth, TX | 104 Livestock Exchange Building | 76106 | 817-624-2209 |
| Greeley, CO | P.O. Box 1411 | 80631 | 303-353-9750 |
| Indianapolis, IN | 539 Turtle Cree, South Drive, Suite 17 | 46227 | 317-331-6363 |
| Jackson, MS | P.O. Box 4357, Fondren Station | 39216 | 601-969-4665 |
| Jefferson City, MO | P.O. Box 630 | 65101 | 314-751-4211 |
| Joliet, IL | P.O. Box 157 | 60434 | 815-423-5064 |

| Office | Address | Zip Code | Phone Number |
|---------------------|----------------------------------------------------------------|----------|--------------|
| Joplin, MO | Newman & Range Line Road | 64801 | 417-624-4660 |
| Kansas City, MO | 760 Livestock Exchange Building | 64102 | 816-842-3808 |
| Lancaster, PA | Union Stk. Yds., 1147 Lititz Pike | 17601 | 717-394-0681 |
| Lansing, MI | Mich. Dept. of Agr., Mktg. Div., Lewis Cass Bldg. | 48913 | 517-373-1054 |
| Little Rock, AR | P.O. Box 391 | 72203 | 501-374-7626 |
| Los Angeles, CA | 4747 Eastern Ave, Bldg. 7, Sec. A, Bell, Calif. | 90201 | 213-265-0536 |
| Louisville, KY | 206-207 LS Exch. Bldg. | 40206 | 502-582-5287 |
| Madison, WI | 801 West Badger Road | 53708 | 608-364-5252 |
| Martinez, CA | Post Office Bldg., 815 Court Street, Room 1 | 94553 | 415-229-2802 |
| Memphis, TN | 465 West Trigg Avenue | 38106 | 901-948-2815 |
| Mexico, MO | Missouri LS Market Center, Inc., Box 318 | 65265 | 314-581-2650 |
| Montgomery, AL | Fed.-State LS MN Serv., P.O. Box 1406 | 36102 | 205-832-6684 |
| Moses Lake, WA | P.O. Box 1071 | 98837 | 509-765-3611 |
| Nashville, TN | P.O. Box 40627, Melrose Station | 37204 | 615-749-5996 |
| Natl Stk. Yards, IL | P.O. Box 38 | 62071 | 618-271-6658 |
| North Salt Lake, UT | North Salt Lake Stockyards | 84054 | 801-524-5001 |
| Oklahoma City, OK | 232 LS Exch. Bldg. | 73108 | 405-232-5425 |
| Omaha, NE | 609 LS Exch. Bldg. | 68107 | 402-731-4520 |
| Peoria, IL | Fed.-St. MN Serv., Rm. 110, Union Stk. Yds., LS Exch. Bldg. | 61602 | 309-676-3123 |
| Phoenix, AZ | Rm. 102, Stockyards Bldg., 5001 E. Washington St. | 85034 | 602-261-4376 |

| Office | Address | Zip | Code | Phone Number |
|--------------------|---------------------------------------------------------|-----|-------|--------------|
| Portland, OR | 1220 SW 3rd Avenue, Room 1772 | | 97204 | 503-221-2237 |
| Princeton, NJ | 1101 State Road, Bldg. E. | | 08540 | 609-921-1386 |
| Redding, CA | Fed.-St. MN Serv. 2135 Akard Avenue, Rm. 8D | | 96001 | 916-246-6516 |
| Sacramento, CA | Fed.-St. MN Serv. 1220 N Street, Room 216 | | 95814 | 916-445-5721 |
| San Angelo, TX | P.O. Box 1523 | | 76901 | 915-653-1778 |
| San Antonio, TX | 215 LS Exch. Bldg., 1716 So. San Marcos | | 78207 | 512-226-7012 |
| Sealy, TX | LS MN Off., P.O. Box 510 | | 77474 | 713-885-2612 |
| Sioux City, IA | 225 LS Exch. Bldg., 800 S. Chambers St. | | 51107 | 712-252-3286 |
| Sioux Falls, SD | 104 LS Exchange Bldg. | | 57101 | 605-338-4061 |
| So. St. Joseph, MO | 318 LS Exchange Bldg. | | 64504 | 816-238-0678 |
| So. St. Paul, MN | P.O. Box 27 | | 55075 | 612-451-1565 |
| Springfield, IL | Ill. Dept. of Agr., State Fairgrounds, Emmerson Bldg. | | 62706 | 217-782-4925 |
| Springfield, MO | 1323 W. Locust Street | | 65803 | 417-866-2331 |
| Stockton, CA | Fed.-St. MN Serv., Skol Bldg., 2321 Washington St. | | 95203 | 209-466-0881 |
| Thomasville, GA | 220 Federal Bldg., Box 86 | | 31792 | 912-226-1641 |
| Torrington, WY | P.O. Box 627 | | 82240 | 307-532-4146 |
| Visalia, CA | P.O. Box 989 | | 93277 | 209-732-2694 |
| West Fargo, ND | 107 LS Exch. Bldg., Annex | | 58078 | 701-783-5101 |
| West Plains, MO | Route 1 | | 65775 | 417-256-6898 |
| Wichita, KS | 8 Livestock Exchange Bldg. | | 67214 | 316-752-6113 |
| Yakima, WA | Fed.-St. MN Serv., Wash. Dept. of Agr., 2015 S. 1st St. | | 98903 | 509-575-2744 |

INSTANT MARKET NEWS

For the latest livestock market news, call these numbers any time day or night:

Alabama

Montgomery
5PM-8AM 1 C-(800)392-5804
5PM-8AM 1 H-(800)392-5801

Springfield (217) 525-4019

Indiana

Indianapolis (800) 382-1567
(Indiana only)

Arkansas

Ft. Smith (501) 785-3892
Little Rock (501) 372-3933

Iowa

Ames (515) 294-6899
(515) 294-4347
Des Moines (515) 282-6870
Durant (319) 785-6032
Sioux City (712) 252-2100

Arizona

Phoenix (602) 275-7972

California

Bell (213) 268-8020
El Centro (714) 352-8160
Redding (916) 246-8480
Stockton (209) 466-3085
Visalia (209) 733-3750

Kansas

Dodge City (316) 225-1311
Wichita (316) 267-7992

Kentucky

Frankfort (502) 564-4958
Louisville (502) 584-6617

Colorado

Brush (303) 842-2249
Greeley (303) 353-5170
Longmont (303) 776-7820
Pueblo (303) 948-2407
Sterling (303) 522-4772

Michigan

Lansing (517) 373-6330

Minnesota

So. St. Paul (612) 451-3692

Florida

Orlando (305) 894-3960

Mississippi

Jackson (601) 355-3176

Georgia

Thomasville (912) 226-9511

Missouri

Jefferson City
(314) 636-4203

Idaho

Burley (208) 678-2424
Pocatello (800) 632-9494

Joplin (417) 781-9451
Kansas City (816) 421-7694
Mexico (314) 581-6250
N/A 8:30-9:15 & 11:30-
12:00 AM

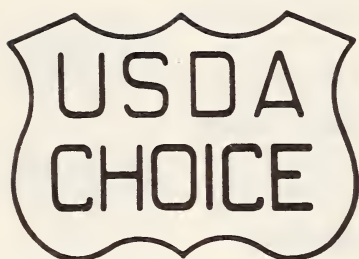
Illinois

Chicago (312) 922-1253
Joliet (815) 423-5026
Peoria (309) 676-8811
Nat'l. Stk. Yds.
(618) 874-1900

So. St. Joseph
(816) 238-1203
Springfield (417) 866-4986
West Plains (417) 256-9631

| | | | |
|---------------------|----------------|-----------------------|----------------|
| Montana | | Pennsylvania | |
| Billings | (406) 252-1480 | New Holland | (717) 354-7288 |
| Nebraska | | South Carolina | |
| Aurora | (402) 694-3183 | Columbia | (803) 799-5568 |
| Beatrice | (402) 233-5231 | Walterboro | (803) 549-5232 |
| Beemer | (402) 528-3654 | South Dakota | |
| Columbus | (402) 564-1133 | Rapid City | (605) 342-1833 |
| David City | (402) 367-4221 | Sioux Falls | (605) 336-7765 |
| Exeter | (402) 266-5461 | Tennessee | |
| Grand Island | (308) 384-5101 | Jackson | (901) 423-2080 |
| Kearney | (308) 237-5908 | Knoxville | (615) 525-3211 |
| Lincoln | (402) 477-3238 | Nashville | (615) 833-4046 |
| Norfolk | (402) 371-9100 | Texas | |
| Omaha | (402) 731-5355 | Amarillo | (806) 372-3494 |
| | (402) 731-4481 | Fort Worth | (817) 624-7451 |
| Superior | (402) 879-4600 | Corsicana | (214) 872-4001 |
| Tekamah | (402) 374-1667 | San Angelo | (915) 655-2358 |
| West Point | (402) 372-5650 | San Antonio | (512) 223-4100 |
| York | (402) 362-6623 | Sealy | (713) 885-2050 |
| New Jersey | | Utah | |
| Princeton | (609) 924-6436 | No. Salt Lake | (801) 524-5001 |
| New Mexico | | 5:00 PM-7:30 AM | |
| Clovis | (505) 763-3030 | Salina | (801) 529-7000 |
| New York | | Washington | |
| Albany | (518) 457-6672 | Sunnyside | (509) 837-2412 |
| North Dakota | | West Virginia | |
| West Fargo | (701) 282-4593 | Charleston | (304) 348-8883 |
| Ohio | | N/A 11:00AM-2:00 PM | |
| Chillicothe | (614) 772-1431 | Wyoming | |
| Columbus | (614) 466-6484 | Cheyenne | (307) 777-7628 |
| London | (614) 852-2311 | Torrington | (307) 532-7200 |
| Washington, C.H. | (614) 335-5100 | Oklahoma | |
| Oklahoma | | Oklahoma City | (405) 236-5491 |
| Tulsa | (918) 437-0740 | | |

KNOW YOUR GRADES



Percent of carcass weight in boneless, closely trimmed, retail cuts from round, loin, rib, and chuck:

YG 1 more than 52.3%

YG 2 50.0 to 52.3%

YG 3 47.7 to 50.0%

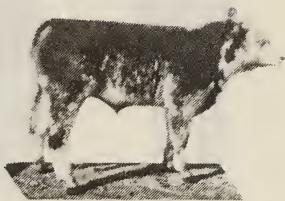
YG 4 45.4 to 47.7%

YG 5 less than 45.4%

Two primary factors influence the value of a beef carcass. One is the quality of the lean—those characteristics which affect palatability, tenderness, juiciness, and flavor. The other value-determining factor is the amount of salable meat. These two factors are a basic consideration in the evaluation of slaughter cattle, and are identified by the USDA quality and yield grade shields at the top,

FEEDER STEERS (CALVES)

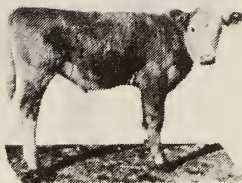
U. S. GRADES



PRIME



CHOICE



GOOD



STANDARD



UTILITY

SLAUGHTER STEERS

U.S. GRADES

(QUALITY)

PRIME ———



CHOICE ———



GOOD —



STANDARD —



UTILITY —



SLAUGHTER STEERS

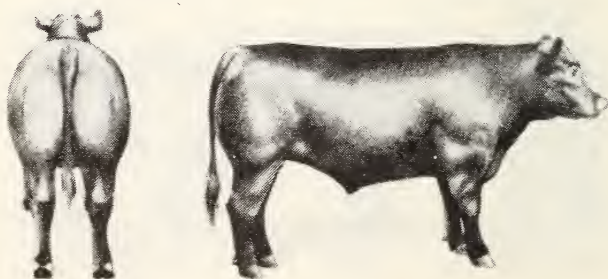
U.S. GRADES

(YIELD)

YIELD GRADE 1 —



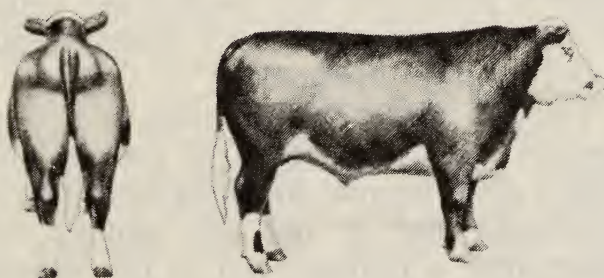
YIELD GRADE 2 —



YIELD GRADE 3 —



YIELD GRADE 4 —



YIELD GRADE 5 —



DRESSED COST TABLES

Livestock prices, on the average, are ultimately determined by the price that meat processors or merchandising agencies can realize from the dressed carcass in wholesale channels. Livestock producers and feeders are becoming more familiar with the various USDA livestock and meat trade reports, the latter reflecting prices of the dressed product. By closely following both livestock and dressed meat reports, producers and feeders are better equipped to find the most advantageous outlet for their livestock.

Table 1 shows approximate yields of carcass as a percentage of the net live weight sold. Normal weighing condition is assumed—that is, net pay weights are taken after a normal haul to the market place and ordinary handling as to feed and water, or such weights taken at a country loading point are given an arbitrary shrink agreed upon by buyer and seller. Yield may vary considerably; for example, a drop in yield occurs under net weight conditions of excessive fill. On the other hand, extremely gaunt or shrunk-out livestock may have relatively high yields. This condition may arise in

long-hauled stock which has not had an opportunity for rest, feed, and water before weighing; stock which has been extensively worked in sorting; stock which has been hauled a normal distance but purposely held off feed and water before weighing; or stock which has been held in corrals overnight, without feed or water, and weighed the following morning. In the case of lambs or sheep, wet pelts may cause a drop in carcass yield unless extra shrinkage is agreed upon.

Table 2 gives a schedule of live prices, converted to carcass prices, according to various percentages of carcass weight realized. For example, fed steers selling at \$40 per cwt. live weight would cost \$66.67 per cwt. in the carcass, if the net carcass yield was 60 percent of the live weight. The same \$40 steer yielding 59 percent would cost \$67.80 in the carcass. The same \$40 steer yielding 61 percent in the carcass would cost \$65.57 per cwt. Table 2 makes no adjustment for such unknown factors as shrinkage in processor's coolers, the gain or loss on animal byproducts realized from slaughtering operations, or operating costs.

**Table 1. APPROXIMATE AVERAGE AND RANGE
IN DRESSING PERCENTAGES OF
VARIOUS KINDS OF LIVESTOCK, BY
GRADES ¹**

| Grade | Range % | Average % |
|----------------------------------------|--------------------|----------------------|
| CATTLE | | |
| Prime | 62-67 .. | 64 |
| Choice | 59-65 .. | 62 |
| Good | 58-62 .. | 60 |
| Standard | 55-60 .. | 57 |
| Commercial | 54-62 .. | 57 |
| Utility | 49-57 .. | 53 |
| Cutter | 45-54 .. | 49 |
| Canner | 40-48 .. | 45 |
| CALVES AND VEALERS ² | | |
| Prime | 59-65 .. | 62 |
| Choice | 56-60 .. | 58 |
| Good | 52-57 .. | 55 |
| Standard | 47-54 .. | 51 |
| Utility | 40-48 .. | 46 |
| LAMBS (Wooled) | | |
| Prime | 49-55 .. | 52 |
| Choice | 47-52 .. | 50 |
| Good | 45-49 .. | 47 |
| Utility | 43-47 .. | 45 |
| Cull | 40-45 .. | 42 |
| SHEEP (Excludes yearlings) | | |
| Choice | 49-54 .. | 52 |
| Good | 47-52 .. | 49 |
| Utility | 44-48 .. | 46 |
| Cull | 40-46 .. | 43 |
| BARROWS and GILTS ³ | | |
| U.S. No. 1 | 68-72 .. | 70 |
| U.S. No. 2 | 69-73 .. | 71 |
| U.S. No. 3 | 70-74 .. | 72 |
| U.S. No. 4 | 71-75 .. | 73 |
| Utility | 67-71 .. | 69 |

¹ All percentages are based on hot weights.

² Based on hide-off carcass weights.

³ Based on packer-style dressing (ham facings, leaf fat, kidneys, and head removed).

Table 2. DRESSED CARCASS COSTS AT VARYING DRESSING PERCENTAGES AND LIVE COSTS

40 TO 50 PERCENT, \$15 TO \$40.75

| Live Cost | 40% | 41% | 42% | 43% | 44% | 45% | 46% | 47% | 48% | 49% | 50% |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 15.00 | 37.50 | 36.59 | 35.71 | 34.88 | 34.09 | 33.33 | 32.61 | 31.91 | 31.25 | 30.61 | 30.00 |
| 15.25 | 38.13 | 37.20 | 36.31 | 35.47 | 34.66 | 33.89 | 33.15 | 32.45 | 31.77 | 31.12 | 30.50 |
| 15.50 | 38.75 | 37.80 | 36.90 | 36.05 | 35.23 | 34.44 | 33.70 | 32.98 | 32.29 | 31.63 | 31.00 |
| 15.75 | 39.38 | 38.41 | 37.50 | 36.63 | 35.80 | 35.00 | 34.24 | 33.51 | 32.81 | 32.14 | 31.50 |
| 16.00 | 40.00 | 39.02 | 38.09 | 37.21 | 36.36 | 35.56 | 34.78 | 34.04 | 33.33 | 32.65 | 32.00 |
| 16.25 | 40.63 | 39.63 | 38.69 | 37.79 | 36.93 | 36.11 | 35.33 | 34.57 | 33.85 | 33.16 | 32.50 |
| 16.50 | 41.25 | 40.24 | 39.29 | 38.37 | 37.50 | 36.67 | 35.87 | 35.11 | 34.38 | 33.67 | 33.00 |
| 16.75 | 41.88 | 40.85 | 39.88 | 38.95 | 38.07 | 37.22 | 36.41 | 35.64 | 34.90 | 34.18 | 33.50 |
| 17.00 | 42.50 | 41.46 | 40.48 | 39.53 | 38.64 | 37.78 | 36.96 | 36.17 | 35.42 | 34.69 | 34.00 |
| 17.25 | 43.13 | 42.07 | 41.07 | 40.12 | 39.20 | 38.33 | 37.50 | 36.70 | 35.94 | 35.20 | 34.50 |
| 17.50 | 43.75 | 42.68 | 41.67 | 40.70 | 39.77 | 38.89 | 38.04 | 37.23 | 36.46 | 35.71 | 35.00 |
| 17.75 | 44.38 | 43.29 | 42.26 | 41.28 | 40.34 | 39.44 | 38.59 | 37.77 | 36.98 | 36.22 | 35.50 |
| 18.00 | 45.00 | 43.90 | 42.86 | 41.86 | 40.91 | 40.00 | 39.13 | 38.30 | 37.50 | 36.73 | 36.00 |
| 18.25 | 45.63 | 44.51 | 43.45 | 42.44 | 41.48 | 40.56 | 39.67 | 38.83 | 38.02 | 37.24 | 36.50 |
| 18.50 | 46.25 | 45.12 | 44.05 | 43.02 | 42.05 | 41.11 | 40.22 | 39.36 | 38.54 | 37.76 | 37.00 |
| 18.75 | 46.88 | 45.73 | 44.64 | 43.60 | 42.61 | 41.67 | 40.76 | 39.89 | 39.06 | 38.27 | 37.50 |
| 19.00 | 47.50 | 46.34 | 45.24 | 44.19 | 43.18 | 42.22 | 41.30 | 40.43 | 39.58 | 38.78 | 38.00 |
| 19.25 | 48.13 | 46.95 | 45.83 | 44.77 | 43.75 | 42.22 | 41.30 | 40.96 | 39.58 | 38.78 | 38.00 |
| 19.50 | 48.75 | 47.56 | 46.43 | 45.35 | 44.32 | 43.33 | 42.39 | 41.49 | 40.62 | 39.80 | 39.00 |
| 19.75 | 49.38 | 48.17 | 47.02 | 45.93 | 44.89 | 43.89 | 42.93 | 42.02 | 41.15 | 40.31 | 39.50 |

| Live Cost | 40% | 41% | 42% | 43% | 44% | 45% | 46% | 47% | 48% | 49% | 50% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 20.00 | 50.00 | 48.78 | 47.62 | 46.51 | 45.45 | 44.44 | 43.48 | 42.55 | 41.67 | 40.82 | 40.00 |
| 20.25 | 50.63 | 49.39 | 48.21 | 47.09 | 46.02 | 45.00 | 44.02 | 43.09 | 42.19 | 41.33 | 40.50 |
| 20.50 | 51.25 | 50.00 | 48.81 | 47.67 | 46.59 | 45.56 | 44.57 | 43.62 | 42.71 | 41.84 | 41.00 |
| 20.75 | 51.88 | 50.61 | 49.40 | 48.26 | 47.16 | 46.11 | 45.11 | 44.15 | 43.23 | 42.35 | 41.50 |
| 21.00 | 52.50 | 51.22 | 50.00 | 48.84 | 47.73 | 46.67 | 45.65 | 44.68 | 43.75 | 42.86 | 42.00 |
| 21.25 | 53.13 | 51.83 | 50.60 | 49.42 | 48.30 | 47.22 | 46.20 | 45.21 | 44.27 | 43.37 | 42.50 |
| 21.50 | 53.75 | 52.44 | 51.19 | 50.00 | 48.86 | 47.78 | 46.74 | 45.74 | 44.79 | 43.88 | 43.00 |
| 21.75 | 54.38 | 53.05 | 51.79 | 50.58 | 49.43 | 48.33 | 47.28 | 46.28 | 45.31 | 44.39 | 43.50 |
| 22.00 | 55.00 | 53.66 | 52.38 | 51.16 | 50.00 | 48.89 | 47.83 | 46.81 | 45.83 | 44.90 | 44.00 |
| 22.25 | 55.63 | 54.27 | 52.98 | 51.74 | 50.57 | 49.44 | 48.37 | 47.34 | 46.35 | 45.41 | 44.50 |
| 22.50 | 56.25 | 54.88 | 53.57 | 52.33 | 51.14 | 50.00 | 48.91 | 47.87 | 46.88 | 45.92 | 45.00 |
| 22.75 | 56.88 | 55.49 | 54.17 | 52.91 | 51.70 | 50.56 | 49.46 | 48.40 | 47.40 | 46.43 | 45.50 |
| 23.00 | 57.50 | 56.10 | 54.76 | 53.49 | 52.27 | 51.11 | 50.00 | 48.94 | 47.92 | 46.94 | 46.00 |
| 23.25 | 58.13 | 56.71 | 55.36 | 54.07 | 52.84 | 51.67 | 50.54 | 49.47 | 48.44 | 47.45 | 46.50 |
| 23.50 | 58.75 | 57.32 | 55.95 | 54.65 | 53.41 | 52.22 | 51.09 | 50.00 | 48.96 | 47.96 | 47.00 |
| 23.75 | 59.38 | 57.93 | 56.55 | 55.23 | 53.98 | 52.78 | 51.63 | 50.53 | 49.48 | 48.47 | 47.50 |
| 24.00 | 60.00 | 58.54 | 57.14 | 55.81 | 54.55 | 53.33 | 52.17 | 51.06 | 50.00 | 48.98 | 48.00 |
| 24.25 | 60.63 | 59.15 | 57.74 | 56.40 | 55.11 | 53.89 | 52.72 | 51.60 | 50.52 | 49.49 | 48.50 |
| 24.50 | 61.25 | 59.76 | 58.33 | 56.98 | 55.68 | 54.44 | 53.26 | 52.13 | 51.04 | 50.00 | 49.00 |
| 24.75 | 61.88 | 60.37 | 58.93 | 57.56 | 56.25 | 55.00 | 53.80 | 52.66 | 51.56 | 50.51 | 49.50 |

| Live Cost | 40% | 41% | 42% | 43% | 44% | 45% | 46% | 47% | 48% | 49% | 50% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 25.00 | 62.50 | 60.98 | 59.52 | 58.14 | 56.82 | 55.56 | 54.35 | 53.19 | 52.08 | 51.02 | 50.00 |
| 25.25 | 63.13 | 61.59 | 60.12 | 58.72 | 57.39 | 56.11 | 54.89 | 53.72 | 52.60 | 51.53 | 50.50 |
| 25.50 | 63.75 | 62.20 | 60.71 | 59.30 | 57.95 | 56.67 | 55.43 | 54.26 | 53.13 | 52.04 | 51.00 |
| 25.75 | 64.38 | 62.80 | 61.31 | 59.88 | 58.52 | 57.22 | 55.98 | 54.79 | 53.65 | 52.55 | 51.50 |
| 26.00 | 65.00 | 63.41 | 61.90 | 60.47 | 59.09 | 57.78 | 56.52 | 55.32 | 54.17 | 53.06 | 52.00 |
| 26.25 | 65.63 | 64.02 | 62.50 | 61.05 | 59.66 | 58.33 | 57.07 | 55.85 | 54.69 | 53.57 | 52.50 |
| 26.50 | 66.25 | 64.63 | 63.10 | 61.63 | 60.23 | 58.89 | 57.61 | 56.38 | 55.21 | 54.08 | 53.00 |
| 26.75 | 66.88 | 65.24 | 63.69 | 62.21 | 60.80 | 59.44 | 58.15 | 56.91 | 55.73 | 54.59 | 53.50 |
| 27.00 | 67.50 | 65.85 | 64.29 | 62.79 | 61.36 | 60.00 | 58.70 | 57.45 | 56.25 | 55.10 | 54.00 |
| 27.25 | 68.13 | 66.46 | 64.88 | 63.37 | 61.93 | 60.56 | 59.24 | 57.98 | 56.77 | 55.61 | 54.50 |
| 27.50 | 68.75 | 67.07 | 65.48 | 63.95 | 62.50 | 61.11 | 59.78 | 58.51 | 57.29 | 56.12 | 55.00 |
| 27.75 | 69.38 | 67.68 | 66.07 | 64.53 | 63.07 | 61.67 | 60.33 | 59.04 | 57.81 | 56.63 | 55.50 |
| 28.00 | 70.00 | 68.29 | 66.67 | 65.12 | 63.64 | 62.22 | 60.87 | 59.57 | 58.33 | 57.14 | 56.00 |
| 28.25 | 70.63 | 68.90 | 67.26 | 65.70 | 64.20 | 62.78 | 61.41 | 60.11 | 58.85 | 57.65 | 56.50 |
| 28.50 | 71.25 | 69.51 | 67.86 | 66.28 | 64.77 | 63.33 | 61.96 | 60.64 | 59.38 | 58.16 | 57.00 |
| 28.75 | 71.88 | 70.12 | 68.45 | 66.86 | 65.34 | 63.89 | 62.50 | 61.17 | 59.90 | 58.67 | 57.50 |
| 29.00 | 72.50 | 70.73 | 69.05 | 67.44 | 65.91 | 64.44 | 63.04 | 61.70 | 60.42 | 59.18 | 58.00 |
| 29.25 | 73.13 | 71.34 | 69.64 | 68.02 | 66.48 | 65.00 | 63.59 | 62.23 | 60.94 | 59.69 | 58.50 |
| 29.50 | 73.75 | 71.95 | 70.24 | 68.60 | 67.05 | 65.56 | 64.13 | 62.77 | 61.46 | 60.20 | 59.00 |
| 29.75 | 74.38 | 72.56 | 70.83 | 69.19 | 67.61 | 66.11 | 64.68 | 63.30 | 61.98 | 60.71 | 59.50 |

| Live Cost | 40% | 41% | 42% | 43% | 44% | 45% | 46% | 47% | 48% | 49% | 50% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 30.00 | 75.00 | 73.17 | 71.43 | 69.77 | 68.18 | 66.67 | 65.22 | 63.83 | 62.50 | 61.22 | 60.00 |
| 30.25 | 75.63 | 73.78 | 72.02 | 70.35 | 68.75 | 67.22 | 65.76 | 64.36 | 63.02 | 61.73 | 60.50 |
| 30.50 | 76.25 | 74.39 | 72.62 | 70.93 | 69.32 | 67.78 | 66.30 | 64.89 | 63.54 | 62.24 | 61.00 |
| 30.75 | 76.88 | 75.00 | 73.21 | 71.51 | 69.89 | 68.33 | 66.85 | 65.43 | 64.06 | 62.75 | 61.50 |
| 31.00 | 77.50 | 75.61 | 73.81 | 72.09 | 70.45 | 68.89 | 67.39 | 65.96 | 64.58 | 63.27 | 62.00 |
| 31.25 | 78.13 | 76.22 | 74.40 | 72.67 | 71.02 | 69.44 | 67.93 | 66.49 | 65.10 | 63.78 | 62.50 |
| 31.50 | 78.75 | 76.83 | 75.00 | 73.26 | 71.59 | 70.00 | 68.48 | 67.02 | 65.62 | 64.29 | 63.00 |
| 31.75 | 79.38 | 77.44 | 75.60 | 73.84 | 72.16 | 70.56 | 69.02 | 67.55 | 66.15 | 64.80 | 63.50 |
| 32.00 | 80.00 | 78.04 | 76.19 | 74.41 | 72.73 | 71.11 | 69.57 | 68.08 | 66.67 | 65.31 | 64.00 |
| 32.25 | 80.63 | 78.66 | 76.79 | 75.00 | 73.30 | 71.67 | 70.11 | 68.62 | 67.19 | 65.82 | 64.50 |
| 32.50 | 81.25 | 79.27 | 77.38 | 75.58 | 73.86 | 72.22 | 70.65 | 69.15 | 67.71 | 66.33 | 65.00 |
| 32.75 | 81.88 | 79.88 | 77.98 | 76.16 | 74.43 | 72.78 | 71.20 | 69.68 | 68.23 | 66.84 | 65.50 |
| 33.00 | 82.50 | 80.49 | 78.57 | 76.74 | 75.00 | 73.33 | 71.74 | 70.21 | 68.75 | 67.35 | 66.00 |
| 33.25 | 83.13 | 81.10 | 79.17 | 77.33 | 75.57 | 73.89 | 72.28 | 70.74 | 69.27 | 67.86 | 66.50 |
| 33.50 | 83.75 | 81.71 | 79.76 | 77.91 | 76.14 | 74.44 | 72.83 | 71.28 | 69.80 | 68.36 | 67.00 |
| 33.75 | 84.38 | 82.32 | 80.36 | 78.49 | 76.70 | 75.00 | 73.37 | 71.81 | 70.31 | 68.88 | 67.50 |
| 34.00 | 85.00 | 82.93 | 80.95 | 79.07 | 77.27 | 75.56 | 73.91 | 72.34 | 70.83 | 69.39 | 68.00 |
| 34.25 | 85.63 | 83.54 | 81.55 | 79.65 | 77.84 | 76.11 | 74.46 | 72.87 | 71.35 | 69.90 | 68.50 |
| 34.50 | 86.25 | 84.15 | 82.14 | 80.23 | 78.40 | 76.67 | 75.00 | 73.40 | 71.87 | 70.41 | 69.00 |
| 34.75 | 86.88 | 84.76 | 82.74 | 80.81 | 78.98 | 77.22 | 75.54 | 73.94 | 72.40 | 70.92 | 69.50 |

| Live Cost | 40% | 41% | 42% | 43% | 44% | 45% | 46% | 47% | 48% | 49% | 50% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 35.00 | 87.50 | 85.37 | 83.33 | 81.40 | 79.55 | 77.78 | 76.09 | 74.47 | 72.92 | 71.43 | 70.00 |
| 35.25 | 88.13 | 85.98 | 83.93 | 81.98 | 80.11 | 78.33 | 76.63 | 75.00 | 73.44 | 71.94 | 70.50 |
| 35.50 | 88.75 | 86.59 | 84.52 | 82.56 | 80.68 | 78.89 | 77.17 | 75.53 | 73.96 | 72.44 | 71.00 |
| 35.75 | 89.38 | 87.19 | 85.12 | 83.14 | 81.25 | 79.44 | 77.72 | 76.06 | 74.48 | 72.96 | 71.50 |
| 36.00 | 90.00 | 87.80 | 85.71 | 83.72 | 81.82 | 80.00 | 78.26 | 76.60 | 75.00 | 73.47 | 72.00 |
| 36.25 | 90.63 | 88.41 | 86.31 | 84.30 | 82.39 | 80.56 | 78.80 | 77.13 | 75.52 | 73.98 | 72.50 |
| 36.50 | 91.25 | 89.02 | 86.90 | 84.88 | 82.95 | 81.11 | 79.35 | 77.66 | 76.04 | 74.49 | 73.00 |
| 36.75 | 91.88 | 89.63 | 87.50 | 85.47 | 83.52 | 81.67 | 79.89 | 78.19 | 76.56 | 75.00 | 73.50 |
| 37.00 | 92.50 | 90.24 | 88.10 | 86.05 | 84.09 | 82.22 | 80.43 | 78.72 | 77.08 | 75.51 | 74.00 |
| 37.25 | 93.13 | 90.85 | 88.69 | 86.63 | 84.66 | 82.78 | 80.98 | 79.25 | 77.60 | 76.02 | 74.50 |
| 37.50 | 93.75 | 91.46 | 89.29 | 87.21 | 85.23 | 83.33 | 81.52 | 79.79 | 78.12 | 76.53 | 75.00 |
| 37.75 | 94.38 | 92.07 | 89.88 | 87.79 | 85.80 | 83.89 | 82.07 | 80.32 | 78.65 | 77.04 | 75.50 |
| 38.00 | 95.00 | 92.68 | 90.48 | 88.37 | 86.36 | 84.44 | 82.61 | 80.85 | 79.17 | 77.55 | 76.00 |
| 38.25 | 95.63 | 93.29 | 91.07 | 88.95 | 86.93 | 85.00 | 83.15 | 81.38 | 79.69 | 78.07 | 76.50 |
| 38.50 | 96.25 | 93.90 | 91.67 | 89.53 | 87.50 | 85.56 | 83.70 | 81.91 | 80.21 | 78.57 | 77.00 |
| 38.75 | 96.88 | 94.51 | 92.26 | 90.12 | 88.07 | 86.11 | 84.24 | 82.45 | 80.73 | 79.08 | 77.50 |
| 39.00 | 97.50 | 95.12 | 92.86 | 90.70 | 88.64 | 86.67 | 84.78 | 82.97 | 81.24 | 79.59 | 78.00 |
| 39.25 | 98.13 | 95.73 | 93.45 | 91.28 | 89.20 | 87.22 | 85.33 | 83.51 | 81.77 | 80.10 | 78.50 |
| 39.50 | 98.75 | 96.34 | 94.05 | 91.86 | 89.77 | 87.78 | 85.87 | 84.04 | 82.29 | 80.61 | 79.00 |
| 39.75 | 99.38 | 96.95 | 94.64 | 92.44 | 90.34 | 88.33 | 86.41 | 84.57 | 82.81 | 81.12 | 79.50 |

| Live Cost | 40% | 41% | 42% | 43% | 44% | 45% | 46% | 47% | 48% | 49% | 50% |
|--------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 40.00 | 100.00 | 97.56 | 95.24 | 93.02 | 90.91 | 88.89 | 86.96 | 85.11 | 83.33 | 81.63 | 80.00 |
| 40.25 | 100.63 | 98.17 | 95.83 | 93.60 | 91.48 | 89.44 | 87.50 | 85.64 | 83.85 | 82.14 | 80.50 |
| 40.50 | 101.25 | 98.78 | 96.43 | 94.19 | 92.05 | 90.00 | 88.04 | 86.17 | 84.37 | 82.65 | 81.00 |
| 40.75 | 101.88 | 99.39 | 97.02 | 94.77 | 92.61 | 90.56 | 88.59 | 86.70 | 84.90 | 83.16 | 81.50 |

51 TO 60 PERCENT, \$15 TO \$48

| Live Cost | 51% | 52% | 53% | 54% | 55% | 56% | 57% | 58% | 59% | 60% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 15.00 | 29.41 | 28.85 | 28.30 | 27.78 | 27.27 | 26.79 | 26.32 | 25.86 | 25.42 | 25.00 |
| 15.25 | 29.90 | 29.33 | 28.77 | 28.24 | 27.73 | 27.23 | 26.75 | 26.29 | 25.85 | 25.42 |
| 15.50 | 30.39 | 29.61 | 29.25 | 28.70 | 28.18 | 27.68 | 27.19 | 26.72 | 26.27 | 25.83 |
| 15.75 | 30.88 | 30.29 | 29.72 | 29.17 | 28.64 | 28.13 | 27.63 | 27.16 | 26.69 | 26.25 |
| 16.00 | 31.37 | 30.77 | 30.19 | 29.63 | 29.09 | 28.57 | 28.07 | 27.59 | 27.12 | 26.67 |
| 16.25 | 31.86 | 31.25 | 30.66 | 30.09 | 29.55 | 29.02 | 28.51 | 28.02 | 27.54 | 27.08 |
| 16.50 | 32.35 | 31.73 | 31.13 | 30.56 | 30.00 | 29.46 | 28.95 | 28.45 | 27.97 | 27.50 |
| 16.75 | 32.84 | 32.21 | 31.60 | 31.02 | 30.45 | 29.91 | 29.39 | 28.88 | 28.39 | 27.92 |
| 17.00 | 33.33 | 32.69 | 32.08 | 31.48 | 30.91 | 30.36 | 29.82 | 29.31 | 28.81 | 28.33 |
| 17.25 | 33.82 | 33.17 | 32.55 | 31.94 | 31.36 | 30.80 | 30.26 | 29.74 | 29.24 | 28.75 |
| 17.50 | 34.31 | 33.65 | 33.02 | 32.41 | 31.82 | 31.25 | 30.70 | 30.17 | 29.66 | 29.17 |
| 17.75 | 34.80 | 34.13 | 33.49 | 32.87 | 32.27 | 31.70 | 31.14 | 30.60 | 30.08 | 29.58 |

| Cost | 51% | 52% | 53% | 54% | 55% | 56% | 57% | 58% | 59% | 60% |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 18.00 | 35.29 | 34.62 | 33.96 | 33.33 | 32.73 | 32.14 | 31.58 | 31.03 | 30.51 | 30.00 |
| 18.25 | 35.78 | 35.10 | 34.43 | 33.80 | 33.18 | 32.59 | 32.02 | 31.47 | 30.93 | 30.42 |
| 18.50 | 36.27 | 35.58 | 34.91 | 34.26 | 33.64 | 33.04 | 32.46 | 31.90 | 31.36 | 30.83 |
| 18.75 | 36.76 | 36.06 | 35.38 | 34.72 | 34.09 | 33.48 | 32.89 | 32.33 | 31.78 | 31.25 |
| 19.00 | 37.25 | 36.54 | 35.85 | 35.19 | 34.55 | 33.93 | 33.33 | 32.76 | 32.20 | 31.67 |
| 19.25 | 37.75 | 37.02 | 36.32 | 35.65 | 35.00 | 34.37 | 33.77 | 33.19 | 32.63 | 32.08 |
| 19.50 | 38.24 | 37.50 | 36.79 | 36.11 | 35.45 | 34.82 | 34.21 | 33.62 | 33.05 | 32.50 |
| 19.75 | 38.73 | 37.98 | 37.26 | 36.57 | 35.91 | 35.26 | 34.65 | 34.05 | 33.47 | 32.92 |
| 20.00 | 39.22 | 38.46 | 37.74 | 37.04 | 36.36 | 35.71 | 35.09 | 34.48 | 33.90 | 33.33 |
| 20.25 | 39.71 | 38.94 | 38.21 | 37.50 | 36.82 | 36.16 | 35.53 | 34.91 | 34.32 | 33.75 |
| 20.50 | 40.20 | 39.42 | 38.68 | 37.96 | 37.27 | 36.61 | 35.96 | 35.34 | 34.75 | 34.17 |
| 20.75 | 40.69 | 39.90 | 39.15 | 38.43 | 37.73 | 37.05 | 36.40 | 35.78 | 35.17 | 34.58 |
| 21.00 | 41.18 | 40.38 | 39.62 | 38.89 | 38.18 | 37.50 | 36.84 | 36.21 | 35.59 | 35.00 |
| 21.25 | 41.67 | 40.86 | 40.09 | 39.35 | 38.64 | 37.95 | 37.28 | 36.64 | 36.02 | 35.42 |
| 21.50 | 42.16 | 41.35 | 40.57 | 39.81 | 39.09 | 38.39 | 37.72 | 37.07 | 36.44 | 35.83 |
| 21.75 | 42.65 | 41.83 | 41.04 | 40.28 | 39.55 | 38.84 | 38.16 | 37.50 | 36.86 | 36.25 |
| 22.00 | 43.14 | 42.31 | 41.51 | 40.74 | 40.00 | 39.29 | 38.60 | 37.93 | 37.29 | 36.67 |
| 22.25 | 43.63 | 42.79 | 41.98 | 41.20 | 40.45 | 39.73 | 39.03 | 38.36 | 37.71 | 37.08 |
| 22.50 | 44.12 | 43.27 | 42.45 | 41.67 | 40.91 | 40.18 | 39.47 | 38.79 | 38.14 | 37.50 |
| 22.75 | 44.61 | 43.75 | 42.92 | 42.13 | 41.36 | 40.62 | 39.91 | 39.22 | 38.56 | 37.92 |

| Live Cost | 51% | 52% | 53% | 54% | 55% | 56% | 57% | 58% | 59% | 60% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 23.00 | 45.10 | 44.23 | 43.40 | 42.59 | 41.82 | 41.07 | 40.35 | 39.65 | 38.98 | 38.33 |
| 23.25 | 45.59 | 44.71 | 43.87 | 43.06 | 42.27 | 41.52 | 40.79 | 40.09 | 39.41 | 38.75 |
| 23.50 | 46.08 | 45.19 | 44.34 | 43.52 | 42.73 | 41.96 | 41.23 | 40.52 | 39.83 | 39.17 |
| 23.75 | 46.57 | 45.67 | 44.81 | 43.98 | 43.18 | 42.41 | 41.67 | 40.95 | 40.25 | 39.58 |
| 24.00 | 47.06 | 46.15 | 45.28 | 44.44 | 43.64 | 42.86 | 42.11 | 41.38 | 40.68 | 40.00 |
| 24.25 | 47.55 | 46.63 | 45.75 | 44.91 | 44.09 | 43.30 | 42.54 | 41.81 | 41.10 | 40.42 |
| 24.50 | 48.04 | 47.12 | 46.23 | 45.37 | 44.55 | 43.75 | 42.98 | 42.24 | 41.53 | 40.83 |
| 24.75 | 48.53 | 47.60 | 46.70 | 45.83 | 45.00 | 44.20 | 43.42 | 42.67 | 41.95 | 41.25 |
| 25.00 | 49.02 | 48.08 | 47.17 | 46.30 | 45.45 | 44.64 | 43.86 | 43.10 | 42.37 | 41.67 |
| 25.25 | 49.51 | 48.56 | 47.64 | 46.76 | 45.91 | 45.09 | 44.30 | 43.53 | 42.80 | 42.08 |
| 25.50 | 50.00 | 49.04 | 48.11 | 47.22 | 46.37 | 45.54 | 44.74 | 43.97 | 43.22 | 42.50 |
| 25.75 | 50.49 | 49.52 | 48.58 | 47.69 | 46.82 | 45.98 | 45.18 | 44.40 | 43.64 | 42.92 |
| 26.00 | 50.98 | 50.00 | 49.06 | 48.15 | 47.27 | 46.43 | 45.61 | 44.83 | 44.07 | 43.33 |
| 26.25 | 51.47 | 50.48 | 49.53 | 48.61 | 47.73 | 46.87 | 46.05 | 45.26 | 44.49 | 43.75 |
| 26.50 | 51.96 | 50.96 | 50.00 | 49.07 | 48.18 | 47.32 | 46.49 | 45.69 | 44.92 | 44.17 |
| 26.75 | 52.45 | 51.44 | 50.47 | 49.54 | 48.64 | 47.77 | 46.93 | 46.12 | 45.34 | 44.58 |
| 27.00 | 52.94 | 51.92 | 50.94 | 50.00 | 49.09 | 48.21 | 47.37 | 46.55 | 45.76 | 45.00 |
| 27.25 | 53.43 | 52.40 | 51.42 | 50.46 | 49.55 | 48.66 | 47.81 | 46.98 | 46.19 | 45.42 |
| 27.50 | 53.92 | 52.88 | 51.89 | 50.93 | 50.00 | 49.11 | 48.25 | 47.41 | 46.61 | 45.83 |
| 27.75 | 54.41 | 53.37 | 52.36 | 51.39 | 50.45 | 49.55 | 48.68 | 47.84 | 47.03 | 46.25 |

| Live Cost | 51% | 52% | 53% | 54% | 55% | 56% | 57% | 58% | 59% | 60% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 28.00 | 54.90 | 53.85 | 52.83 | 51.85 | 50.91 | 50.00 | 49.12 | 48.28 | 47.46 | 46.67 |
| 28.25 | 55.39 | 54.33 | 53.30 | 52.31 | 51.36 | 50.45 | 49.56 | 48.71 | 47.88 | 47.08 |
| 28.50 | 55.88 | 54.81 | 53.77 | 52.78 | 51.82 | 50.89 | 50.00 | 49.14 | 48.30 | 47.50 |
| 28.75 | 56.37 | 55.29 | 54.25 | 53.24 | 52.27 | 51.34 | 50.44 | 49.57 | 48.73 | 47.92 |
| 29.00 | 56.86 | 55.77 | 54.72 | 53.70 | 52.73 | 51.79 | 50.88 | 50.00 | 49.15 | 48.33 |
| 29.25 | 57.35 | 56.25 | 55.19 | 54.17 | 53.18 | 52.23 | 51.32 | 50.43 | 49.59 | 48.75 |
| 29.50 | 57.84 | 56.73 | 55.66 | 54.63 | 53.64 | 52.68 | 51.75 | 50.86 | 50.00 | 49.17 |
| 29.75 | 58.33 | 57.21 | 56.13 | 55.09 | 54.09 | 53.12 | 52.19 | 51.29 | 50.42 | 49.58 |
| 30.00 | 58.62 | 57.69 | 56.60 | 55.56 | 54.55 | 53.57 | 52.63 | 51.72 | 50.85 | 50.00 |
| 30.25 | 59.31 | 58.17 | 57.08 | 56.02 | 55.00 | 54.02 | 53.07 | 52.15 | 51.27 | 50.42 |
| 30.50 | 59.80 | 58.65 | 57.55 | 56.48 | 55.45 | 54.46 | 53.51 | 52.59 | 51.69 | 50.83 |
| 30.75 | 60.29 | 59.13 | 58.02 | 56.94 | 55.91 | 54.91 | 53.95 | 53.02 | 52.12 | 51.25 |
| 31.00 | 60.78 | 59.62 | 58.49 | 57.41 | 56.36 | 55.36 | 54.39 | 53.45 | 52.54 | 51.67 |
| 31.25 | 61.27 | 60.10 | 58.96 | 57.87 | 56.82 | 55.80 | 54.82 | 53.88 | 52.97 | 52.08 |
| 31.50 | 61.76 | 60.58 | 59.43 | 58.33 | 57.27 | 56.25 | 55.26 | 54.31 | 53.39 | 52.50 |
| 31.75 | 62.25 | 61.06 | 59.91 | 58.80 | 57.73 | 56.70 | 55.70 | 54.74 | 53.81 | 52.92 |
| 32.00 | 62.74 | 61.54 | 60.38 | 59.26 | 58.18 | 57.14 | 56.14 | 55.17 | 54.24 | 53.33 |
| 32.25 | 63.24 | 62.02 | 60.85 | 59.72 | 58.64 | 57.59 | 56.58 | 55.60 | 54.66 | 53.75 |
| 32.50 | 63.73 | 62.50 | 61.32 | 60.19 | 59.09 | 58.04 | 57.02 | 56.03 | 55.08 | 54.17 |
| 32.75 | 64.22 | 62.98 | 61.79 | 60.65 | 59.55 | 58.48 | 57.46 | 56.47 | 55.51 | 54.58 |

| Live Cost | 51% | 52% | 53% | 54% | 55% | 56% | 57% | 58% | 59% | 60% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 33.00 | 64.71 | 63.46 | 62.26 | 61.11 | 60.00 | 58.92 | 57.89 | 56.90 | 55.93 | 55.00 |
| 33.25 | 65.20 | 63.94 | 62.74 | 61.57 | 60.45 | 59.37 | 58.33 | 57.33 | 56.36 | 55.42 |
| 33.50 | 65.69 | 64.42 | 63.21 | 62.04 | 60.91 | 59.82 | 58.77 | 57.76 | 56.78 | 55.83 |
| 33.75 | 66.18 | 64.90 | 63.68 | 62.50 | 61.36 | 60.27 | 59.21 | 58.19 | 57.20 | 56.25 |
| 34.00 | 66.67 | 65.38 | 64.15 | 62.96 | 61.82 | 60.71 | 59.65 | 58.62 | 57.63 | 56.67 |
| 34.25 | 67.16 | 65.87 | 64.62 | 63.43 | 62.27 | 61.16 | 60.09 | 59.05 | 58.05 | 57.08 |
| 34.50 | 67.65 | 66.35 | 65.09 | 63.89 | 62.73 | 61.61 | 60.53 | 59.48 | 58.47 | 57.50 |
| 34.75 | 68.14 | 66.83 | 65.57 | 64.35 | 63.18 | 62.05 | 60.96 | 59.91 | 58.90 | 57.92 |
| 35.00 | 68.63 | 67.31 | 66.04 | 64.81 | 63.64 | 62.50 | 61.40 | 60.34 | 59.32 | 58.33 |
| 35.25 | 69.12 | 67.79 | 66.51 | 65.28 | 64.09 | 62.95 | 61.84 | 60.78 | 59.75 | 58.75 |
| 35.50 | 69.61 | 68.27 | 66.98 | 65.74 | 64.55 | 63.39 | 62.28 | 61.21 | 60.17 | 59.17 |
| 35.75 | 70.10 | 68.75 | 67.45 | 66.20 | 65.00 | 63.84 | 62.72 | 61.64 | 60.59 | 59.58 |
| 36.00 | 70.59 | 69.23 | 67.92 | 66.67 | 65.45 | 64.29 | 63.16 | 62.07 | 61.02 | 60.00 |
| 36.25 | 71.08 | 69.71 | 68.40 | 67.13 | 65.91 | 64.73 | 63.60 | 62.50 | 61.44 | 60.42 |
| 36.50 | 71.57 | 70.19 | 68.87 | 67.59 | 66.36 | 65.18 | 64.03 | 62.93 | 61.86 | 60.83 |
| 36.75 | 72.06 | 70.67 | 69.34 | 68.06 | 66.82 | 65.62 | 64.47 | 63.36 | 62.29 | 61.25 |
| 37.00 | 72.55 | 71.15 | 69.81 | 68.52 | 67.27 | 66.07 | 64.91 | 63.79 | 62.71 | 61.67 |
| 37.25 | 73.04 | 71.63 | 70.28 | 68.98 | 67.73 | 66.52 | 65.35 | 64.22 | 63.14 | 62.08 |
| 37.50 | 73.53 | 72.12 | 70.75 | 69.44 | 68.18 | 66.96 | 65.79 | 64.65 | 63.56 | 62.50 |
| 37.75 | 74.02 | 72.60 | 71.23 | 69.91 | 68.64 | 67.41 | 66.23 | 65.09 | 63.98 | 62.92 |

| Cost | 51% | 52% | 53% | 54% | 55% | 56% | 57% | 58% | 59% | 60% |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 38.00 | 74.51 | 73.08 | 71.70 | 70.37 | 69.09 | 67.86 | 66.67 | 65.52 | 64.41 | 63.38 |
| 38.25 | 75.00 | 73.56 | 72.17 | 70.83 | 69.55 | 68.30 | 67.11 | 65.95 | 64.83 | 63.75 |
| 38.50 | 75.49 | 74.04 | 72.64 | 71.30 | 70.00 | 68.75 | 67.54 | 66.38 | 65.25 | 64.17 |
| 38.75 | 75.98 | 74.52 | 73.11 | 71.76 | 70.45 | 69.20 | 67.98 | 66.81 | 65.68 | 64.58 |
| 39.00 | 76.47 | 75.00 | 73.58 | 72.22 | 70.91 | 69.64 | 68.42 | 67.24 | 66.10 | 65.00 |
| 39.25 | 76.96 | 75.48 | 74.06 | 72.69 | 71.36 | 70.09 | 68.86 | 67.67 | 66.53 | 65.42 |
| 39.50 | 77.45 | 75.96 | 74.53 | 73.15 | 71.82 | 70.54 | 69.30 | 68.10 | 66.95 | 65.83 |
| 39.75 | 77.94 | 76.44 | 75.00 | 73.61 | 72.27 | 70.98 | 69.74 | 68.53 | 67.37 | 66.25 |
| 40.00 | 78.43 | 76.92 | 75.47 | 74.07 | 72.73 | 71.43 | 70.18 | 68.97 | 67.80 | 66.67 |
| 40.25 | 78.92 | 77.40 | 75.94 | 74.54 | 73.18 | 71.87 | 70.61 | 69.40 | 68.22 | 67.08 |
| 40.50 | 79.41 | 77.88 | 76.41 | 75.00 | 73.64 | 72.32 | 71.05 | 69.83 | 68.64 | 67.50 |
| 40.75 | 79.90 | 78.37 | 76.89 | 75.46 | 74.09 | 72.77 | 71.49 | 70.26 | 69.07 | 67.92 |
| 41.00 | 80.39 | 78.85 | 77.36 | 75.93 | 74.55 | 73.21 | 71.93 | 70.69 | 69.49 | 68.33 |
| 41.25 | 80.88 | 79.33 | 77.83 | 76.39 | 75.00 | 73.66 | 72.37 | 71.12 | 69.92 | 68.75 |
| 41.50 | 81.37 | 79.81 | 78.30 | 76.85 | 75.45 | 74.11 | 72.81 | 71.55 | 70.34 | 69.17 |
| 41.75 | 81.86 | 80.29 | 78.77 | 77.31 | 75.91 | 74.55 | 73.25 | 71.98 | 70.76 | 69.58 |
| 42.00 | 82.35 | 80.77 | 79.25 | 77.78 | 76.36 | 75.00 | 73.68 | 72.41 | 71.19 | 70.00 |
| 42.25 | 82.84 | 81.25 | 79.72 | 78.24 | 76.82 | 75.45 | 74.12 | 72.84 | 71.61 | 70.42 |
| 42.50 | 83.33 | 81.73 | 80.19 | 78.70 | 77.27 | 75.89 | 74.56 | 73.28 | 72.03 | 70.83 |
| 42.75 | 83.82 | 82.21 | 80.66 | 79.17 | 77.73 | 76.34 | 75.00 | 73.71 | 72.46 | 71.25 |

| Live Cost | 51% | 52% | 53% | 54% | 55% | 56% | 57% | 58% | 59% | 60% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 43.00 | 84.31 | 82.69 | 81.13 | 79.63 | 78.18 | 76.79 | 75.44 | 74.14 | 72.88 | 71.67 |
| 43.25 | 84.80 | 83.17 | 81.60 | 80.09 | 78.64 | 77.23 | 75.88 | 74.57 | 73.30 | 72.08 |
| 43.50 | 85.29 | 83.65 | 82.08 | 80.56 | 79.09 | 77.68 | 76.32 | 75.00 | 73.73 | 72.50 |
| 43.75 | 85.78 | 84.13 | 82.55 | 81.02 | 79.55 | 78.12 | 76.75 | 75.43 | 74.15 | 72.92 |
| 44.00 | 86.28 | 84.62 | 83.02 | 81.48 | 80.00 | 78.57 | 77.19 | 75.86 | 74.58 | 73.33 |
| 44.25 | 86.76 | 85.10 | 83.49 | 81.94 | 80.45 | 79.02 | 77.63 | 76.29 | 75.00 | 73.75 |
| 44.50 | 87.25 | 85.58 | 83.96 | 82.41 | 80.91 | 79.46 | 78.07 | 76.72 | 75.42 | 74.17 |
| 44.75 | 87.75 | 86.06 | 84.43 | 82.87 | 81.36 | 79.91 | 78.51 | 77.15 | 75.85 | 74.58 |
| 45.00 | 88.24 | 86.54 | 84.91 | 83.33 | 81.82 | 80.36 | 78.95 | 77.59 | 76.27 | 75.00 |
| 45.25 | 88.73 | 87.02 | 85.38 | 83.80 | 82.27 | 80.80 | 79.39 | 78.02 | 76.69 | 75.42 |
| 45.50 | 89.22 | 87.50 | 85.85 | 84.26 | 82.73 | 81.25 | 79.82 | 78.45 | 77.12 | 75.83 |
| 45.75 | 89.71 | 87.98 | 86.32 | 84.72 | 83.18 | 81.70 | 80.26 | 78.88 | 77.54 | 76.25 |
| 46.00 | 90.20 | 88.46 | 86.79 | 85.19 | 83.64 | 82.14 | 80.70 | 79.31 | 77.97 | 76.67 |
| 46.25 | 90.67 | 88.94 | 87.26 | 85.65 | 84.09 | 82.59 | 81.14 | 79.74 | 78.39 | 77.08 |
| 46.50 | 91.18 | 89.42 | 87.74 | 86.11 | 84.55 | 83.04 | 81.58 | 80.17 | 78.81 | 77.50 |
| 46.75 | 91.67 | 89.90 | 88.21 | 86.57 | 85.00 | 83.48 | 82.02 | 80.60 | 79.24 | 77.92 |
| 47.00 | 92.16 | 90.39 | 88.68 | 87.04 | 85.45 | 83.93 | 82.46 | 81.03 | 79.66 | 78.33 |
| 47.25 | 92.65 | 90.87 | 89.15 | 87.50 | 85.91 | 84.37 | 82.89 | 81.47 | 80.08 | 78.75 |
| 47.50 | 93.14 | 91.35 | 89.62 | 87.96 | 86.36 | 84.82 | 83.33 | 81.90 | 80.51 | 79.17 |
| 47.75 | 93.63 | 91.83 | 90.09 | 88.43 | 86.82 | 85.27 | 83.77 | 82.33 | 80.93 | 79.58 |
| 48.00 | 94.12 | 92.31 | 90.57 | 88.89 | 87.27 | 85.71 | 84.21 | 82.76 | 81.36 | 80.00 |

55 to 65 PERCENT, \$15 TO \$60

| Live Cost | 55% | 56% | 57% | 58% | 59% | 60% | 61% | 62% | 63% | 64% | 65% |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 15.00 | 27.27 | 26.79 | 26.32 | 25.86 | 25.42 | 25.00 | 24.59 | 24.19 | 23.81 | 23.44 | 23.08 |
| 15.25 | 27.73 | 27.23 | 26.75 | 26.29 | 25.85 | 25.42 | 25.00 | 24.60 | 24.21 | 23.83 | 23.46 |
| 15.50 | 28.18 | 27.68 | 27.19 | 26.72 | 26.27 | 25.83 | 25.41 | 25.00 | 24.60 | 24.21 | 23.85 |
| 15.75 | 28.64 | 28.13 | 27.63 | 27.16 | 26.69 | 26.25 | 25.82 | 25.40 | 25.00 | 24.61 | 24.23 |
| 16.00 | 29.09 | 28.57 | 28.07 | 27.59 | 27.12 | 26.67 | 26.23 | 25.81 | 25.40 | 25.00 | 24.62 |
| 16.25 | 29.55 | 29.02 | 28.51 | 28.02 | 27.54 | 27.08 | 26.64 | 26.21 | 25.79 | 25.39 | 25.00 |
| 16.50 | 30.00 | 29.46 | 28.95 | 28.45 | 27.97 | 27.50 | 27.05 | 26.61 | 26.19 | 25.78 | 25.38 |
| 16.75 | 30.45 | 29.91 | 29.38 | 28.88 | 28.39 | 27.92 | 27.46 | 27.02 | 26.59 | 26.17 | 25.77 |
| 17.00 | 30.91 | 30.36 | 29.82 | 29.31 | 28.81 | 28.33 | 27.87 | 27.41 | 26.98 | 26.56 | 26.15 |
| 17.25 | 31.36 | 30.80 | 30.26 | 29.74 | 29.24 | 28.75 | 28.28 | 27.82 | 27.38 | 26.95 | 26.54 |
| 17.50 | 31.82 | 31.25 | 30.70 | 30.17 | 29.66 | 29.17 | 28.69 | 28.22 | 27.78 | 27.34 | 26.92 |
| 17.75 | 32.27 | 31.70 | 31.14 | 30.60 | 30.08 | 29.58 | 29.10 | 28.63 | 28.17 | 27.73 | 27.31 |
| 18.00 | 32.73 | 32.14 | 31.58 | 31.03 | 30.51 | 30.00 | 29.51 | 29.03 | 28.57 | 28.12 | 27.69 |
| 18.25 | 33.18 | 32.59 | 32.02 | 31.47 | 30.93 | 30.42 | 29.92 | 29.44 | 28.97 | 28.52 | 28.08 |
| 18.50 | 33.64 | 33.04 | 32.46 | 31.90 | 31.36 | 30.83 | 30.33 | 29.84 | 29.37 | 28.91 | 28.46 |
| 18.75 | 34.09 | 33.48 | 32.89 | 32.33 | 31.78 | 31.25 | 30.74 | 30.24 | 29.76 | 29.30 | 28.85 |
| 19.00 | 34.55 | 33.93 | 33.33 | 32.76 | 32.20 | 31.67 | 31.15 | 30.65 | 30.16 | 29.69 | 29.23 |
| 19.25 | 35.00 | 34.38 | 33.77 | 33.19 | 32.63 | 32.08 | 31.56 | 31.05 | 30.56 | 30.08 | 29.62 |
| 19.50 | 35.45 | 34.82 | 34.21 | 33.62 | 33.05 | 32.50 | 31.97 | 31.45 | 30.95 | 30.47 | 30.00 |
| 19.75 | 35.91 | 35.27 | 34.65 | 34.05 | 33.47 | 32.92 | 32.38 | 31.85 | 31.35 | 30.86 | 30.38 |

| Live Cost | 55% | 56% | 57% | 58% | 59% | 60% | 61% | 62% | 63% | 64% | 65% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 20.00 | 36.36 | 35.71 | 35.09 | 34.48 | 33.90 | 33.33 | 32.79 | 32.26 | 31.75 | 31.25 | 30.77 |
| 20.25 | 36.82 | 36.16 | 35.53 | 34.91 | 34.32 | 33.75 | 33.20 | 32.66 | 32.14 | 31.64 | 31.15 |
| 20.50 | 37.27 | 36.61 | 35.96 | 35.34 | 34.75 | 34.17 | 33.61 | 33.06 | 32.54 | 32.03 | 31.54 |
| 20.75 | 37.73 | 37.05 | 36.40 | 35.78 | 35.17 | 34.58 | 34.02 | 33.47 | 32.94 | 32.42 | 31.92 |
| 21.00 | 38.18 | 37.50 | 36.84 | 36.21 | 35.59 | 35.00 | 34.43 | 33.87 | 33.33 | 32.81 | 32.31 |
| 21.25 | 38.64 | 37.95 | 37.28 | 36.64 | 36.02 | 35.42 | 34.84 | 34.27 | 33.73 | 33.20 | 32.69 |
| 21.50 | 39.09 | 38.39 | 37.72 | 37.07 | 36.44 | 35.83 | 35.25 | 34.68 | 34.13 | 33.59 | 33.08 |
| 21.75 | 39.55 | 38.84 | 38.16 | 37.50 | 36.86 | 36.25 | 35.66 | 35.08 | 34.52 | 33.98 | 33.46 |
| 22.00 | 40.00 | 39.29 | 38.60 | 37.93 | 37.29 | 36.67 | 36.07 | 35.48 | 34.92 | 34.38 | 33.85 |
| 22.25 | 40.45 | 39.73 | 39.04 | 38.36 | 37.71 | 37.08 | 36.48 | 35.89 | 35.32 | 34.77 | 34.23 |
| 22.50 | 40.91 | 40.18 | 39.47 | 38.79 | 38.14 | 37.50 | 36.89 | 36.29 | 35.71 | 35.16 | 34.62 |
| 22.75 | 41.36 | 40.63 | 39.91 | 39.22 | 38.56 | 37.92 | 37.30 | 36.69 | 36.11 | 35.55 | 35.00 |
| 23.00 | 41.82 | 41.07 | 40.35 | 39.65 | 38.98 | 38.33 | 37.70 | 37.10 | 36.51 | 35.94 | 35.38 |
| 23.25 | 42.27 | 41.52 | 40.79 | 40.09 | 39.41 | 38.75 | 38.11 | 37.50 | 36.90 | 36.33 | 35.77 |
| 23.50 | 42.73 | 41.96 | 41.23 | 40.52 | 39.83 | 39.17 | 38.52 | 37.90 | 37.30 | 36.72 | 36.15 |
| 23.75 | 43.18 | 42.41 | 41.67 | 40.95 | 40.25 | 39.58 | 38.93 | 38.31 | 37.70 | 37.11 | 36.54 |
| 24.00 | 43.64 | 42.86 | 42.11 | 41.38 | 40.68 | 40.00 | 39.34 | 38.71 | 38.10 | 37.50 | 36.92 |
| 24.25 | 44.09 | 43.30 | 42.54 | 41.81 | 41.10 | 40.42 | 39.75 | 39.11 | 38.49 | 37.89 | 37.31 |
| 24.50 | 44.55 | 43.75 | 42.98 | 42.24 | 41.53 | 40.83 | 40.16 | 39.52 | 38.89 | 38.28 | 37.69 |
| 24.75 | 45.00 | 44.20 | 43.42 | 42.67 | 41.95 | 41.25 | 40.57 | 39.92 | 39.29 | 38.67 | 38.08 |

| Live Cost | 55% | 56% | 57% | 58% | 59% | 60% | 61% | 62% | 63% | 64% | 65% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 25.00 | 45.45 | 44.64 | 43.86 | 43.10 | 42.37 | 41.67 | 40.98 | 40.32 | 39.68 | 39.06 | 38.46 |
| 25.25 | 45.91 | 45.09 | 44.30 | 43.53 | 42.80 | 42.08 | 41.39 | 40.73 | 40.08 | 39.45 | 38.85 |
| 25.50 | 46.36 | 45.54 | 44.74 | 43.97 | 43.22 | 42.50 | 41.80 | 41.13 | 40.48 | 39.84 | 39.23 |
| 25.75 | 46.82 | 45.98 | 45.18 | 44.40 | 43.64 | 42.92 | 42.21 | 41.53 | 40.87 | 40.23 | 39.62 |
| 26.00 | 47.27 | 46.43 | 45.61 | 44.83 | 44.07 | 43.33 | 42.62 | 41.94 | 41.27 | 40.63 | 40.00 |
| 26.25 | 47.73 | 46.88 | 46.05 | 45.26 | 44.49 | 43.75 | 43.03 | 42.34 | 41.67 | 41.02 | 40.38 |
| 26.50 | 48.18 | 47.32 | 46.49 | 45.69 | 44.92 | 44.17 | 43.44 | 42.74 | 42.06 | 41.41 | 40.77 |
| 26.75 | 48.64 | 47.77 | 46.93 | 46.12 | 45.34 | 44.58 | 43.85 | 43.15 | 42.46 | 41.80 | 41.15 |
| 27.00 | 49.09 | 48.21 | 47.37 | 46.55 | 45.76 | 45.00 | 44.26 | 43.55 | 42.86 | 42.19 | 41.54 |
| 27.25 | 49.55 | 48.66 | 47.81 | 46.98 | 46.19 | 45.42 | 44.67 | 43.95 | 43.25 | 42.58 | 41.92 |
| 27.50 | 50.00 | 49.11 | 48.25 | 47.41 | 46.61 | 45.83 | 45.08 | 44.35 | 43.65 | 42.96 | 42.31 |
| 27.75 | 50.45 | 49.55 | 48.68 | 47.84 | 47.03 | 46.25 | 45.49 | 44.76 | 44.05 | 43.36 | 42.69 |
| 28.00 | 50.91 | 50.00 | 49.12 | 48.28 | 47.46 | 46.67 | 45.90 | 45.16 | 44.44 | 43.75 | 43.08 |
| 28.25 | 51.36 | 50.45 | 49.56 | 48.71 | 47.88 | 47.08 | 46.31 | 45.56 | 44.84 | 44.14 | 43.46 |
| 28.50 | 51.82 | 50.89 | 50.00 | 49.14 | 48.31 | 47.50 | 46.72 | 45.97 | 45.24 | 44.53 | 43.85 |
| 28.75 | 52.27 | 51.34 | 50.44 | 49.57 | 48.73 | 47.92 | 47.13 | 46.37 | 45.63 | 44.92 | 44.23 |
| 29.00 | 52.73 | 51.79 | 50.88 | 50.00 | 49.15 | 48.33 | 47.54 | 46.77 | 46.03 | 45.31 | 44.62 |
| 29.25 | 53.18 | 52.23 | 51.32 | 50.43 | 49.58 | 48.75 | 47.95 | 47.18 | 46.43 | 45.70 | 45.00 |
| 29.50 | 53.64 | 52.68 | 51.75 | 50.86 | 50.00 | 49.17 | 48.36 | 47.58 | 46.83 | 46.09 | 45.38 |
| 29.75 | 54.09 | 53.13 | 52.19 | 51.29 | 50.42 | 49.58 | 48.77 | 47.98 | 47.22 | 46.48 | 45.77 |

| Live Cost | 55% | 56% | 57% | 58% | 59% | 60% | 61% | 62% | 63% | 64% | 65% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 30.00 | 54.55 | 53.57 | 52.63 | 51.72 | 50.85 | 50.00 | 49.18 | 48.39 | 47.62 | 46.88 | 46.15 |
| 30.25 | 55.00 | 54.02 | 53.07 | 52.16 | 51.27 | 50.42 | 49.59 | 48.79 | 48.02 | 47.27 | 46.54 |
| 30.50 | 55.45 | 54.46 | 53.51 | 52.59 | 51.69 | 50.83 | 50.00 | 49.19 | 48.41 | 47.66 | 46.92 |
| 30.75 | 55.91 | 54.91 | 53.95 | 53.02 | 52.12 | 51.25 | 50.41 | 49.60 | 48.81 | 48.05 | 47.31 |
| 31.00 | 56.36 | 55.36 | 54.39 | 53.45 | 52.54 | 51.67 | 50.82 | 50.00 | 49.21 | 48.44 | 47.69 |
| 31.25 | 56.82 | 55.80 | 54.82 | 53.88 | 52.97 | 52.08 | 51.23 | 50.40 | 49.60 | 48.83 | 48.08 |
| 31.50 | 57.27 | 56.25 | 55.26 | 54.31 | 53.39 | 52.50 | 51.64 | 50.81 | 50.00 | 49.22 | 48.46 |
| 31.75 | 57.73 | 56.70 | 55.70 | 54.74 | 53.81 | 52.92 | 52.05 | 51.21 | 50.40 | 49.61 | 48.85 |
| 32.00 | 58.18 | 57.14 | 56.14 | 55.17 | 54.24 | 53.33 | 52.46 | 51.61 | 50.79 | 50.00 | 49.23 |
| 32.25 | 58.64 | 57.59 | 56.58 | 55.60 | 54.66 | 53.75 | 52.87 | 52.02 | 51.19 | 50.39 | 49.62 |
| 32.50 | 59.09 | 58.04 | 57.02 | 56.03 | 55.08 | 54.17 | 53.28 | 52.42 | 51.59 | 50.78 | 50.00 |
| 32.75 | 59.55 | 58.48 | 57.46 | 56.47 | 55.51 | 54.58 | 53.69 | 52.82 | 51.98 | 51.17 | 50.38 |
| 33.00 | 60.00 | 58.93 | 57.89 | 56.90 | 55.93 | 55.00 | 54.10 | 53.23 | 52.38 | 51.56 | 50.77 |
| 33.25 | 60.45 | 59.38 | 58.33 | 57.33 | 56.36 | 55.42 | 54.51 | 53.63 | 52.78 | 51.95 | 51.15 |
| 33.50 | 60.91 | 59.82 | 58.77 | 57.76 | 56.78 | 55.83 | 54.92 | 54.03 | 53.17 | 52.34 | 51.54 |
| 33.75 | 61.36 | 60.27 | 59.21 | 58.19 | 57.20 | 56.25 | 55.33 | 54.44 | 53.57 | 52.73 | 51.92 |
| 34.00 | 61.82 | 60.71 | 59.65 | 58.62 | 57.63 | 56.67 | 55.74 | 54.84 | 53.97 | 53.13 | 52.31 |
| 34.25 | 62.27 | 61.16 | 60.09 | 59.05 | 58.05 | 57.08 | 56.15 | 55.24 | 54.37 | 53.52 | 52.69 |
| 34.50 | 62.73 | 61.61 | 60.53 | 59.48 | 58.47 | 57.50 | 56.56 | 55.65 | 54.76 | 53.91 | 53.08 |
| 34.75 | 63.18 | 62.05 | 60.96 | 59.91 | 58.90 | 57.92 | 56.97 | 56.05 | 55.16 | 54.30 | 53.46 |

| Live Cost | 55% | 56% | 57% | 58% | 59% | 60% | 61% | 62% | 63% | 64% | 65% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 35.00 | 63.64 | 62.50 | 61.40 | 60.34 | 59.32 | 58.33 | 57.38 | 56.45 | 55.56 | 54.69 | 53.85 |
| 35.25 | 64.09 | 62.95 | 61.84 | 60.78 | 59.75 | 58.75 | 57.79 | 56.85 | 55.95 | 55.08 | 54.23 |
| 35.50 | 64.55 | 63.39 | 62.28 | 61.21 | 60.17 | 59.17 | 58.20 | 57.26 | 56.35 | 55.47 | 54.62 |
| 35.75 | 65.00 | 63.84 | 62.72 | 61.64 | 50.59 | 59.58 | 58.61 | 57.66 | 56.75 | 55.86 | 55.00 |
| 36.00 | 65.45 | 64.29 | 63.16 | 62.07 | 61.02 | 60.00 | 59.02 | 58.06 | 57.14 | 56.25 | 55.38 |
| 36.25 | 65.91 | 64.73 | 63.60 | 62.50 | 61.44 | 60.42 | 59.43 | 58.47 | 57.54 | 56.64 | 55.77 |
| 36.50 | 66.36 | 65.18 | 64.03 | 62.93 | 61.86 | 60.83 | 59.84 | 58.87 | 57.94 | 57.03 | 56.15 |
| 36.75 | 66.82 | 65.62 | 64.47 | 63.36 | 62.29 | 61.25 | 60.25 | 59.27 | 58.33 | 57.42 | 56.54 |
| 37.00 | 67.27 | 66.07 | 64.91 | 63.79 | 62.71 | 61.67 | 60.66 | 59.68 | 58.73 | 57.81 | 56.92 |
| 37.25 | 67.73 | 66.52 | 65.35 | 64.22 | 63.14 | 62.08 | 61.07 | 60.08 | 59.13 | 58.20 | 57.31 |
| 37.50 | 68.18 | 66.96 | 65.79 | 64.66 | 63.56 | 62.50 | 61.48 | 60.48 | 59.52 | 58.59 | 57.69 |
| 37.75 | 68.64 | 67.41 | 66.23 | 65.09 | 63.98 | 62.92 | 61.89 | 60.89 | 59.92 | 58.98 | 58.08 |
| 38.00 | 69.09 | 67.86 | 66.67 | 65.52 | 64.41 | 63.33 | 62.30 | 61.29 | 60.32 | 59.39 | 58.46 |
| 38.25 | 69.55 | 68.30 | 67.11 | 65.95 | 64.83 | 63.75 | 62.70 | 61.69 | 60.71 | 59.77 | 58.85 |
| 38.50 | 70.00 | 68.75 | 67.54 | 66.38 | 65.25 | 64.17 | 63.11 | 62.10 | 61.11 | 60.16 | 59.23 |
| 38.75 | 70.45 | 69.20 | 67.98 | 66.81 | 65.68 | 64.58 | 63.52 | 62.50 | 61.51 | 60.55 | 59.62 |
| 39.00 | 70.91 | 69.64 | 68.42 | 67.24 | 66.10 | 65.00 | 63.93 | 62.90 | 61.90 | 60.94 | 60.00 |
| 39.25 | 71.36 | 70.09 | 68.86 | 67.67 | 66.53 | 65.42 | 64.34 | 63.31 | 62.30 | 61.33 | 60.38 |
| 39.50 | 71.82 | 70.54 | 69.30 | 68.10 | 66.95 | 65.83 | 64.75 | 63.71 | 62.70 | 61.72 | 60.77 |
| 39.75 | 72.27 | 70.98 | 69.74 | 68.53 | 67.37 | 66.25 | 65.16 | 64.11 | 63.10 | 62.11 | 61.15 |

| | 55% | 56% | 57% | 58% | 59% | 60% | 61% | 62% | 63% | 64% | 65% |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 40.00 | 72.73 | 71.43 | 70.18 | 68.97 | 67.80 | 66.67 | 65.57 | 64.52 | 63.49 | 62.50 | 61.54 |
| 40.25 | 73.18 | 71.88 | 70.61 | 69.40 | 68.22 | 67.08 | 65.98 | 64.92 | 63.89 | 62.89 | 61.92 |
| 40.50 | 73.64 | 72.32 | 71.05 | 69.83 | 68.64 | 67.50 | 66.39 | 65.32 | 64.29 | 63.28 | 62.31 |
| 40.75 | 74.09 | 72.77 | 71.49 | 70.26 | 69.07 | 67.92 | 66.80 | 65.73 | 64.68 | 63.67 | 62.69 |
| 41.00 | 74.55 | 73.21 | 71.93 | 70.69 | 69.49 | 68.33 | 67.21 | 66.13 | 65.08 | 64.06 | 63.08 |
| 41.25 | 75.00 | 73.66 | 72.37 | 71.12 | 69.92 | 68.75 | 67.62 | 66.53 | 65.48 | 64.45 | 63.46 |
| 41.50 | 74.45 | 74.11 | 72.81 | 71.55 | 70.34 | 69.17 | 68.03 | 66.94 | 65.87 | 64.84 | 63.85 |
| 41.75 | 75.91 | 74.55 | 73.25 | 71.98 | 70.76 | 69.58 | 68.44 | 67.34 | 66.27 | 65.23 | 64.23 |
| 42.00 | 76.36 | 75.00 | 73.68 | 72.41 | 71.19 | 70.00 | 68.85 | 67.74 | 66.67 | 65.63 | 64.62 |
| 42.25 | 76.82 | 75.45 | 74.12 | 72.84 | 71.61 | 70.42 | 69.26 | 68.15 | 67.06 | 66.02 | 65.00 |
| 42.50 | 77.27 | 75.89 | 74.56 | 73.28 | 72.03 | 70.83 | 69.67 | 68.55 | 67.46 | 66.41 | 65.38 |
| 42.75 | 77.73 | 76.34 | 75.00 | 73.71 | 72.46 | 71.25 | 70.08 | 68.95 | 67.86 | 66.80 | 65.77 |
| 43.00 | 78.18 | 76.79 | 75.44 | 74.14 | 72.88 | 71.67 | 70.49 | 69.35 | 68.25 | 67.19 | 66.15 |
| 43.25 | 78.64 | 77.23 | 75.88 | 74.57 | 73.30 | 72.08 | 70.90 | 69.76 | 68.65 | 67.58 | 66.54 |
| 43.50 | 79.09 | 77.68 | 76.32 | 75.00 | 73.73 | 72.50 | 71.31 | 70.16 | 69.05 | 67.97 | 66.92 |
| 43.75 | 79.55 | 78.12 | 76.75 | 75.43 | 74.15 | 72.92 | 71.72 | 70.56 | 69.44 | 68.36 | 67.31 |
| 44.00 | 80.00 | 78.57 | 77.19 | 75.86 | 74.58 | 73.33 | 72.13 | 70.97 | 69.84 | 68.75 | 67.69 |
| 44.25 | 80.45 | 79.02 | 77.63 | 76.29 | 75.00 | 73.75 | 72.54 | 71.37 | 70.24 | 69.14 | 68.08 |
| 44.50 | 80.91 | 79.46 | 78.07 | 76.72 | 75.42 | 74.17 | 72.95 | 71.77 | 70.63 | 69.53 | 68.46 |
| 44.75 | 81.36 | 79.91 | 78.51 | 77.15 | 75.85 | 74.58 | 73.36 | 72.18 | 71.03 | 69.92 | 68.85 |

| Live Cost | 55% | 56% | 57% | 58% | 59% | 60% | 61% | 62% | 63% | 64% | 65% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 45.00 | 81.82 | 80.36 | 78.95 | 77.59 | 76.27 | 75.00 | 73.77 | 72.58 | 71.43 | 70.31 | 69.23 |
| 45.25 | 82.27 | 80.80 | 79.39 | 78.02 | 76.69 | 75.42 | 74.18 | 72.98 | 71.83 | 70.70 | 69.62 |
| 45.50 | 82.73 | 81.25 | 79.82 | 78.45 | 77.12 | 75.83 | 74.59 | 73.39 | 72.22 | 71.09 | 70.00 |
| 45.75 | 83.18 | 81.70 | 80.26 | 78.88 | 77.54 | 76.25 | 75.00 | 73.79 | 72.62 | 71.48 | 70.38 |
| 46.00 | 83.64 | 82.14 | 80.70 | 79.31 | 77.97 | 76.67 | 75.41 | 74.19 | 73.02 | 71.88 | 70.77 |
| 46.25 | 84.09 | 82.59 | 81.14 | 79.74 | 78.39 | 77.08 | 75.82 | 74.60 | 73.41 | 72.27 | 71.15 |
| 46.50 | 84.55 | 83.04 | 81.58 | 80.17 | 78.81 | 77.50 | 76.23 | 75.00 | 73.81 | 72.66 | 71.54 |
| 46.75 | 85.00 | 83.48 | 82.02 | 80.60 | 79.24 | 77.92 | 76.64 | 75.40 | 74.20 | 73.05 | 71.92 |
| 47.00 | 85.45 | 83.93 | 82.46 | 81.03 | 79.66 | 78.33 | 77.05 | 75.81 | 74.60 | 73.44 | 72.31 |
| 47.25 | 85.91 | 84.37 | 82.89 | 81.47 | 80.08 | 78.75 | 77.46 | 76.21 | 75.00 | 73.83 | 72.69 |
| 47.50 | 86.36 | 84.82 | 83.33 | 81.90 | 80.51 | 79.17 | 77.87 | 76.61 | 75.40 | 74.22 | 73.08 |
| 47.75 | 86.82 | 85.27 | 83.77 | 82.33 | 80.93 | 79.58 | 78.28 | 77.02 | 75.79 | 74.61 | 73.46 |
| 48.00 | 87.27 | 85.71 | 84.21 | 82.76 | 81.36 | 80.00 | 78.69 | 77.42 | 76.19 | 75.00 | 73.85 |
| 48.25 | 87.73 | 86.16 | 84.65 | 83.19 | 81.78 | 80.42 | 79.10 | 77.82 | 76.59 | 75.39 | 74.23 |
| 48.50 | 88.18 | 86.61 | 85.09 | 83.62 | 82.20 | 80.83 | 79.51 | 78.23 | 76.98 | 75.78 | 74.62 |
| 48.75 | 88.64 | 87.05 | 85.53 | 84.05 | 82.63 | 81.25 | 79.92 | 78.63 | 77.38 | 76.17 | 75.00 |
| 49.00 | 89.09 | 87.50 | 85.96 | 84.48 | 83.05 | 81.67 | 80.33 | 79.03 | 77.78 | 76.56 | 75.38 |
| 49.25 | 89.55 | 87.95 | 86.40 | 84.91 | 83.47 | 82.08 | 80.74 | 79.44 | 78.17 | 76.95 | 75.77 |
| 49.50 | 90.00 | 88.39 | 86.84 | 85.34 | 83.90 | 82.50 | 81.15 | 79.84 | 78.57 | 77.34 | 76.15 |
| 49.75 | 90.45 | 88.84 | 87.28 | 85.78 | 84.32 | 82.92 | 81.56 | 80.24 | 78.97 | 77.73 | 76.54 |

| Live Cost | 55% | 56% | 57% | 58% | 59% | 60% | 61% | 62% | 63% | 64% | 65% |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50.00 | 90.91 | 89.29 | 87.72 | 86.21 | 84.75 | 83.33 | 81.97 | 80.65 | 79.37 | 78.13 | 76.92 |
| 50.25 | 91.36 | 89.73 | 88.16 | 86.64 | 85.17 | 83.75 | 82.38 | 81.05 | 79.76 | 78.52 | 77.31 |
| 50.50 | 91.82 | 90.18 | 88.60 | 87.07 | 85.59 | 84.17 | 82.79 | 81.45 | 80.16 | 78.91 | 77.69 |
| 50.75 | 92.27 | 90.62 | 89.03 | 87.50 | 86.02 | 84.58 | 83.20 | 81.85 | 80.56 | 79.30 | 78.08 |
| 51.00 | 92.73 | 91.07 | 89.47 | 87.93 | 86.44 | 85.00 | 83.61 | 82.26 | 80.95 | 79.69 | 78.49 |
| 51.25 | 93.18 | 91.52 | 89.91 | 88.36 | 86.86 | 85.42 | 84.02 | 82.66 | 81.35 | 80.08 | 78.85 |
| 51.50 | 93.64 | 91.96 | 90.35 | 88.79 | 87.29 | 85.83 | 84.43 | 83.06 | 81.75 | 80.47 | 79.23 |
| 51.75 | 94.09 | 92.41 | 90.79 | 89.22 | 87.71 | 86.25 | 84.84 | 83.47 | 82.14 | 80.86 | 79.62 |
| 52.00 | 94.55 | 92.86 | 91.23 | 89.66 | 88.14 | 86.67 | 85.25 | 83.87 | 82.54 | 81.25 | 80.00 |
| 52.25 | 95.00 | 93.30 | 91.67 | 90.09 | 88.56 | 87.08 | 85.66 | 84.27 | 82.94 | 81.64 | 80.38 |
| 52.50 | 95.95 | 93.75 | 92.11 | 90.52 | 88.98 | 87.50 | 86.07 | 84.68 | 83.33 | 82.03 | 80.77 |
| 52.75 | 95.91 | 94.20 | 92.54 | 90.95 | 89.41 | 87.92 | 86.48 | 85.08 | 83.73 | 82.42 | 81.15 |
| 53.00 | 96.36 | 94.64 | 92.98 | 91.38 | 89.83 | 88.33 | 86.89 | 85.48 | 84.13 | 82.81 | 81.54 |
| 53.25 | 96.82 | 95.09 | 93.42 | 91.81 | 90.25 | 88.75 | 87.30 | 85.89 | 84.52 | 83.20 | 81.92 |
| 53.50 | 97.27 | 95.54 | 93.86 | 92.24 | 90.68 | 89.17 | 87.70 | 86.29 | 84.92 | 83.59 | 82.31 |
| 53.75 | 97.73 | 95.98 | 94.30 | 92.67 | 91.10 | 89.58 | 88.11 | 86.69 | 85.32 | 83.98 | 82.69 |
| 54.00 | 98.18 | 96.43 | 94.74 | 93.10 | 91.53 | 90.00 | 88.52 | 87.10 | 85.71 | 84.38 | 83.08 |
| 54.25 | 98.64 | 96.88 | 95.18 | 93.53 | 91.95 | 90.42 | 88.93 | 87.50 | 86.11 | 84.76 | 83.46 |
| 54.50 | 99.09 | 97.32 | 95.61 | 93.97 | 92.37 | 90.83 | 89.34 | 87.90 | 86.51 | 85.16 | 83.85 |
| 54.75 | 99.55 | 97.77 | 96.05 | 94.40 | 92.80 | 91.25 | 89.75 | 88.31 | 86.90 | 85.55 | 84.23 |

| Live Cost | 55% | 56% | 57% | 58% | 59% | 60% | 61% | 62% | 63% | 64% | 65% |
|--------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 55.00 | 100.00 | 98.22 | 96.49 | 94.83 | 93.22 | 91.67 | 90.16 | 88.71 | 87.30 | 85.94 | 84.62 |
| 55.25 | 100.45 | 98.66 | 96.93 | 95.26 | 93.64 | 92.08 | 90.57 | 89.11 | 87.70 | 86.33 | 85.00 |
| 55.50 | 100.91 | 99.11 | 97.37 | 95.69 | 94.07 | 92.50 | 90.98 | 89.52 | 88.10 | 86.72 | 85.38 |
| 55.75 | 101.36 | 99.55 | 97.81 | 96.12 | 94.49 | 92.92 | 91.39 | 89.92 | 88.49 | 87.11 | 85.77 |
| 56.00 | 101.82 | 100.00 | 98.25 | 96.55 | 94.92 | 93.33 | 91.80 | 90.32 | 88.89 | 87.50 | 86.15 |
| 56.25 | 102.27 | 100.45 | 98.68 | 96.98 | 95.34 | 93.75 | 92.21 | 90.73 | 89.29 | 87.89 | 86.54 |
| 56.50 | 102.72 | 100.89 | 99.12 | 97.41 | 95.76 | 94.17 | 92.62 | 91.13 | 89.68 | 88.28 | 86.92 |
| 56.75 | 103.18 | 101.34 | 99.56 | 97.84 | 96.19 | 94.58 | 93.03 | 91.53 | 90.08 | 88.67 | 87.31 |
| 57.00 | 103.64 | 101.79 | 100.00 | 98.28 | 96.61 | 95.00 | 93.44 | 91.94 | 90.48 | 89.06 | 87.69 |
| 57.25 | 104.09 | 102.23 | 100.44 | 98.71 | 97.03 | 95.42 | 93.85 | 92.34 | 90.87 | 89.45 | 88.08 |
| 57.50 | 104.55 | 102.68 | 100.88 | 99.14 | 97.46 | 95.83 | 94.26 | 92.75 | 91.27 | 89.84 | 88.46 |
| 57.75 | 105.00 | 103.13 | 101.32 | 99.57 | 97.88 | 96.25 | 94.67 | 93.15 | 91.67 | 90.23 | 88.85 |
| 58.00 | 105.46 | 103.57 | 101.76 | 100.00 | 98.31 | 96.67 | 95.08 | 93.55 | 92.06 | 90.63 | 89.23 |
| 58.25 | 105.91 | 104.02 | 102.19 | 100.43 | 98.73 | 97.08 | 95.49 | 93.95 | 92.46 | 91.06 | 89.62 |
| 58.50 | 106.36 | 104.46 | 102.63 | 100.86 | 99.15 | 97.50 | 95.90 | 94.35 | 92.86 | 91.41 | 90.00 |
| 58.75 | 106.82 | 104.91 | 103.07 | 101.29 | 99.58 | 97.92 | 96.31 | 94.76 | 93.25 | 91.80 | 90.38 |
| 59.00 | 107.27 | 105.36 | 103.51 | 101.73 | 100.00 | 98.33 | 96.72 | 95.16 | 93.65 | 92.19 | 90.77 |
| 59.25 | 107.73 | 105.80 | 103.95 | 102.16 | 100.42 | 98.75 | 97.13 | 95.56 | 94.05 | 92.58 | 91.15 |
| 59.50 | 108.18 | 106.25 | 104.39 | 102.59 | 100.85 | 99.17 | 97.54 | 95.97 | 94.44 | 92.97 | 91.54 |
| 59.75 | 108.64 | 106.70 | 104.82 | 103.02 | 101.27 | 99.58 | 97.95 | 96.37 | 94.84 | 93.36 | 91.92 |
| 60.00 | 109.09 | 107.14 | 105.26 | 103.45 | 101.70 | 100.00 | 98.36 | 96.78 | 95.24 | 93.75 | 92.31 |

SHRINKAGE CONVERSION TABLES

Two shrinkage conversion tables are provided as an aid in determining the relationship of prices to weights when various percentages of shrink are used.

Table 3 shows the actual price received when shrinkage rates of 2, 3, 4, 6, and 8 percent are deducted. For example, if a buyer offers \$40 per hundredweight for heifer yearlings with 3 percent shrink allowance, the seller will receive \$38.80 per cwt.

Table 4 shows prices necessary to compensate the seller at shrinkage rates of 2, 3, 4, 6, and 8 percent. For example, if the seller wishes to realize \$40 per hundredweight and the shrinkage during shipment is 3 percent, the market price will have to be \$41.24 to compensate for the shrinkage.

Table 3. OFFER PRICES WITH VARYING RATES OF SHRINKAGE DEDUCTED (\$ PER CWT.)

| <u>Offer</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|--------------|-----------|-----------|-----------|-----------|-----------|
| 80.00 | 78.40 | 77.60 | 76.80 | 75.20 | 73.60 |
| 79.50 | 77.91 | 77.12 | 76.32 | 74.73 | 73.14 |
| 79.00 | 77.42 | 76.63 | 75.84 | 74.26 | 72.68 |
| 78.50 | 76.93 | 76.15 | 75.36 | 73.79 | 72.22 |
| 78.00 | 76.44 | 75.66 | 74.88 | 73.32 | 71.76 |
| 77.50 | 75.95 | 75.18 | 74.40 | 72.85 | 71.30 |
| 77.00 | 75.46 | 74.69 | 73.92 | 72.38 | 70.84 |
| 76.50 | 74.97 | 74.21 | 73.44 | 71.91 | 70.38 |
| 76.00 | 74.48 | 73.72 | 72.96 | 71.44 | 69.92 |
| 75.50 | 73.99 | 73.24 | 72.48 | 70.79 | 69.46 |
| 75.00 | 73.50 | 72.75 | 72.00 | 70.50 | 69.00 |
| 74.50 | 73.01 | 72.27 | 71.52 | 70.03 | 68.54 |

| <u>Offer</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|--------------|-----------|-----------|-----------|-----------|-----------|
| 74.00 | 72.52 | 71.78 | 71.04 | 69.56 | 68.08 |
| 73.50 | 72.03 | 71.30 | 70.56 | 69.09 | 67.62 |
| 73.00 | 71.54 | 70.81 | 70.08 | 68.62 | 67.16 |
| 72.50 | 71.05 | 70.33 | 69.60 | 68.15 | 66.70 |
| 72.00 | 70.56 | 69.84 | 69.12 | 67.68 | 66.24 |
| 71.50 | 70.07 | 69.36 | 68.64 | 67.21 | 65.78 |
| 71.00 | 69.58 | 68.87 | 68.16 | 66.74 | 65.32 |
| 70.50 | 69.09 | 68.39 | 67.68 | 66.27 | 64.86 |
| 70.00 | 68.60 | 67.90 | 67.20 | 65.80 | 64.40 |
| 69.50 | 68.11 | 67.42 | 66.72 | 65.33 | 63.94 |
| 69.00 | 67.62 | 66.93 | 66.24 | 64.86 | 63.48 |
| 68.50 | 67.13 | 66.45 | 65.76 | 64.39 | 63.02 |
| 68.00 | 66.64 | 65.96 | 65.28 | 63.92 | 62.56 |
| 67.50 | 66.15 | 65.48 | 64.80 | 63.45 | 62.10 |
| 67.00 | 65.66 | 64.99 | 64.32 | 62.98 | 61.64 |
| 66.50 | 65.17 | 64.51 | 63.84 | 62.51 | 61.18 |
| 66.00 | 64.68 | 64.02 | 63.36 | 62.04 | 60.72 |
| 65.50 | 64.19 | 63.54 | 62.88 | 61.57 | 60.26 |
| 65.00 | 63.70 | 63.05 | 62.40 | 61.10 | 59.80 |
| 64.50 | 63.21 | 62.57 | 61.92 | 60.63 | 59.34 |
| 64.00 | 62.72 | 62.08 | 61.44 | 60.16 | 58.88 |
| 63.50 | 62.23 | 61.60 | 60.96 | 59.69 | 58.42 |
| 63.00 | 61.74 | 61.11 | 60.48 | 59.22 | 57.96 |
| 62.50 | 61.25 | 60.63 | 60.00 | 58.75 | 57.50 |
| 62.00 | 60.76 | 60.14 | 59.52 | 58.28 | 57.04 |
| 61.50 | 60.27 | 59.66 | 59.04 | 57.81 | 56.58 |
| 61.00 | 59.78 | 59.17 | 58.56 | 57.34 | 56.12 |
| 60.50 | 59.29 | 58.69 | 58.08 | 56.87 | 55.66 |
| 60.00 | 58.80 | 58.20 | 57.60 | 56.40 | 55.20 |
| 59.50 | 58.31 | 57.72 | 57.12 | 55.93 | 54.74 |
| 59.00 | 57.82 | 57.23 | 56.64 | 55.46 | 54.28 |
| 58.50 | 57.33 | 56.75 | 56.16 | 54.99 | 53.82 |
| 58.00 | 56.84 | 56.26 | 55.68 | 54.52 | 53.36 |
| 57.50 | 56.35 | 55.78 | 55.20 | 54.05 | 52.90 |
| 57.00 | 55.86 | 55.29 | 54.72 | 53.58 | 52.44 |
| 56.50 | 55.37 | 54.81 | 54.24 | 53.11 | 51.98 |

| <u>Offer</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|--------------|-----------|-----------|-----------|-----------|-----------|
| 56.00 | 54.88 | 54.32 | 53.76 | 52.64 | 51.52 |
| 55.50 | 54.39 | 53.84 | 53.28 | 52.17 | 51.06 |
| 55.00 | 53.90 | 53.35 | 52.80 | 51.70 | 50.60 |
| 54.50 | 53.41 | 52.87 | 52.32 | 51.23 | 50.14 |
| 54.00 | 52.92 | 52.38 | 51.84 | 50.76 | 49.68 |
| 53.50 | 52.43 | 51.90 | 51.36 | 50.29 | 49.22 |
| 53.00 | 51.94 | 51.41 | 50.88 | 49.82 | 48.76 |
| 52.50 | 51.45 | 50.92 | 50.40 | 49.35 | 48.30 |
| 52.00 | 50.96 | 50.44 | 49.92 | 48.88 | 47.84 |
| 51.50 | 50.47 | 49.96 | 49.44 | 48.41 | 47.38 |
| 51.00 | 49.98 | 49.47 | 48.96 | 47.94 | 46.92 |
| 50.50 | 49.49 | 48.99 | 48.48 | 47.47 | 46.46 |
| 50.00 | 49.00 | 48.50 | 48.00 | 47.00 | 46.00 |
| 49.50 | 48.51 | 48.02 | 47.52 | 46.53 | 45.54 |
| 49.00 | 48.02 | 47.53 | 47.04 | 46.06 | 45.08 |
| 48.50 | 47.53 | 47.05 | 46.56 | 45.59 | 44.62 |
| 48.00 | 47.04 | 46.56 | 46.08 | 45.12 | 44.16 |
| 47.50 | 46.55 | 46.08 | 45.60 | 44.65 | 43.70 |
| 47.00 | 46.06 | 45.59 | 45.12 | 44.18 | 43.24 |
| 46.50 | 45.57 | 45.11 | 44.64 | 43.71 | 42.78 |
| 46.00 | 45.08 | 44.62 | 44.16 | 43.24 | 42.32 |
| 45.50 | 44.59 | 44.14 | 43.68 | 42.77 | 41.86 |
| 45.00 | 44.10 | 43.65 | 43.20 | 42.30 | 41.40 |
| 44.50 | 43.61 | 43.17 | 42.72 | 41.83 | 40.94 |
| 44.00 | 43.12 | 42.68 | 42.24 | 41.36 | 40.48 |
| 43.50 | 42.63 | 42.20 | 41.76 | 40.89 | 40.02 |
| 43.00 | 42.14 | 41.71 | 41.28 | 40.42 | 39.56 |
| 42.50 | 41.65 | 41.23 | 40.80 | 39.95 | 39.10 |
| 42.00 | 41.16 | 40.74 | 40.32 | 39.48 | 38.64 |
| 41.50 | 40.67 | 40.26 | 39.84 | 39.01 | 38.18 |
| 41.00 | 40.18 | 39.77 | 39.36 | 38.54 | 37.72 |
| 40.50 | 39.69 | 39.29 | 38.88 | 38.07 | 37.26 |
| 40.00 | 39.20 | 38.80 | 38.40 | 37.70 | 36.80 |
| 39.50 | 38.71 | 38.32 | 37.92 | 37.13 | 36.34 |
| 39.00 | 38.22 | 37.83 | 37.44 | 36.66 | 35.88 |
| 38.50 | 37.73 | 37.34 | 36.96 | 36.19 | 35.42 |

| <u>Offer</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|--------------|-----------|-----------|-----------|-----------|-----------|
| 38.00 | 37.24 | 36.86 | 36.48 | 35.72 | 34.96 |
| 37.50 | 36.75 | 36.38 | 36.00 | 35.25 | 34.50 |
| 37.00 | 36.26 | 35.89 | 35.52 | 34.78 | 34.04 |
| 36.50 | 35.77 | 35.41 | 35.04 | 34.31 | 33.58 |
| 36.00 | 35.28 | 34.92 | 34.56 | 33.84 | 33.12 |
| 35.50 | 34.79 | 34.44 | 34.08 | 33.37 | 32.66 |
| 35.00 | 34.30 | 33.95 | 33.60 | 32.90 | 32.20 |
| 34.50 | 33.81 | 33.46 | 33.12 | 32.43 | 31.74 |
| 34.00 | 33.32 | 32.98 | 32.64 | 31.96 | 31.28 |
| 33.50 | 32.83 | 32.50 | 32.16 | 31.49 | 30.82 |
| 33.00 | 32.34 | 32.01 | 31.68 | 31.02 | 30.36 |
| 32.50 | 31.85 | 31.52 | 31.20 | 30.55 | 29.90 |
| 32.00 | 31.36 | 31.04 | 30.72 | 30.08 | 29.44 |
| 31.50 | 30.87 | 30.56 | 30.24 | 29.61 | 28.98 |
| 31.00 | 30.38 | 30.07 | 29.76 | 29.14 | 28.52 |
| 30.50 | 29.89 | 29.58 | 29.28 | 28.67 | 28.06 |
| 30.00 | 29.40 | 29.10 | 28.80 | 28.20 | 27.60 |
| 29.50 | 28.91 | 28.62 | 28.32 | 27.73 | 27.14 |
| 29.00 | 28.42 | 28.13 | 27.84 | 27.26 | 26.68 |
| 28.50 | 27.93 | 27.64 | 27.36 | 26.79 | 26.22 |
| 28.00 | 27.44 | 27.16 | 26.88 | 26.32 | 25.76 |
| 27.50 | 26.95 | 26.68 | 26.40 | 25.85 | 25.30 |
| 27.00 | 26.46 | 26.19 | 25.92 | 25.38 | 24.84 |
| 26.50 | 25.97 | 25.71 | 25.44 | 24.91 | 24.38 |
| 26.00 | 25.48 | 25.22 | 24.96 | 24.44 | 23.92 |
| 25.50 | 24.99 | 24.74 | 24.48 | 23.97 | 23.46 |
| 25.00 | 24.50 | 24.25 | 24.00 | 23.50 | 23.00 |
| 24.50 | 24.01 | 23.76 | 23.52 | 23.03 | 22.54 |
| 24.00 | 23.52 | 23.28 | 23.04 | 22.56 | 22.08 |
| 23.50 | 23.03 | 22.80 | 22.56 | 22.09 | 21.62 |
| 23.00 | 22.54 | 22.31 | 22.08 | 21.62 | 21.16 |
| 22.50 | 22.05 | 21.82 | 21.60 | 21.15 | 20.70 |
| 22.00 | 21.56 | 21.34 | 21.12 | 20.68 | 20.24 |
| 21.50 | 21.07 | 20.85 | 20.64 | 20.21 | 19.78 |
| 21.00 | 20.58 | 20.37 | 20.16 | 19.74 | 19.32 |
| 20.50 | 20.09 | 19.88 | 19.68 | 19.27 | 18.86 |

| <u>Offer</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|--------------|-----------|-----------|-----------|-----------|-----------|
| 20.00 | 19.60 | 19.40 | 19.20 | 18.80 | 18.40 |
| 19.50 | 19.11 | 18.92 | 18.72 | 18.33 | 17.94 |
| 19.00 | 18.62 | 18.43 | 18.24 | 17.86 | 17.48 |
| 18.50 | 18.13 | 17.94 | 17.76 | 17.39 | 17.02 |
| 18.00 | 17.64 | 17.46 | 17.28 | 16.92 | 16.56 |
| 17.50 | 17.15 | 16.98 | 16.80 | 16.45 | 16.10 |
| 17.00 | 16.66 | 16.49 | 16.32 | 15.98 | 15.64 |
| 16.50 | 16.17 | 16.00 | 15.84 | 15.51 | 15.18 |
| 16.00 | 15.68 | 15.52 | 15.36 | 15.04 | 14.72 |
| 15.50 | 15.19 | 15.04 | 14.88 | 14.57 | 14.26 |
| 15.00 | 14.70 | 14.55 | 14.40 | 14.10 | 13.80 |

**Table 4. PRICES NECESSARY TO
COMPENSATE FOR VARYING RATES OF SHRINKAGE
(\$ PER CWT.)**

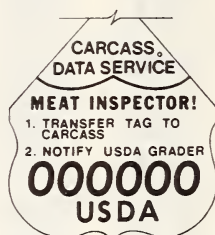
| <u>Asking</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|---------------|-----------|-----------|-----------|-----------|-----------|
| 80.00 | 81.63 | 82.47 | 83.33 | 85.11 | 86.96 |
| 79.50 | 81.12 | 81.96 | 82.81 | 84.57 | 86.41 |
| 79.00 | 80.61 | 81.44 | 82.29 | 84.04 | 85.87 |
| 78.50 | 80.10 | 80.93 | 81.77 | 83.51 | 85.33 |
| 78.00 | 79.59 | 80.41 | 81.25 | 82.98 | 84.78 |
| 77.50 | 79.08 | 79.90 | 80.73 | 82.45 | 84.24 |
| 77.00 | 78.57 | 79.38 | 80.21 | 81.92 | 83.70 |
| 76.50 | 78.06 | 78.87 | 79.69 | 81.38 | 83.15 |
| 76.00 | 77.55 | 78.35 | 79.17 | 80.85 | 82.61 |
| 75.50 | 77.04 | 77.84 | 78.65 | 80.32 | 82.07 |
| 75.00 | 76.53 | 77.32 | 78.13 | 79.79 | 81.52 |
| 74.50 | 76.02 | 76.80 | 77.60 | 79.26 | 80.98 |
| 74.00 | 75.51 | 76.29 | 77.08 | 78.72 | 80.44 |
| 73.50 | 75.00 | 75.77 | 76.56 | 78.19 | 79.89 |
| 73.00 | 74.49 | 75.26 | 76.04 | 77.66 | 79.35 |
| 72.50 | 73.98 | 74.74 | 75.52 | 77.13 | 78.80 |

| <u>Asking</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|---------------|-----------|-----------|-----------|-----------|-----------|
| 72.00 | 73.47 | 74.23 | 75.00 | 76.60 | 78.26 |
| 71.50 | 72.96 | 73.71 | 74.48 | 76.06 | 77.72 |
| 71.00 | 72.45 | 73.20 | 73.96 | 75.53 | 77.17 |
| 70.50 | 71.94 | 72.68 | 73.44 | 75.00 | 76.63 |
| 70.00 | 71.43 | 72.17 | 72.92 | 74.47 | 76.09 |
| 69.50 | 70.92 | 71.65 | 72.40 | 73.94 | 75.54 |
| 69.00 | 70.41 | 71.13 | 71.88 | 73.41 | 75.00 |
| 68.50 | 69.90 | 70.62 | 71.35 | 72.87 | 74.46 |
| 68.00 | 69.39 | 70.10 | 70.83 | 72.34 | 73.91 |
| 67.50 | 68.88 | 69.59 | 70.31 | 71.81 | 73.37 |
| 67.00 | 68.37 | 69.07 | 69.79 | 71.28 | 72.83 |
| 66.50 | 67.86 | 68.56 | 69.27 | 70.74 | 72.28 |
| 66.00 | 67.35 | 68.04 | 68.75 | 70.21 | 71.74 |
| 65.50 | 66.84 | 67.53 | 68.23 | 69.68 | 71.20 |
| 65.00 | 66.33 | 67.01 | 67.71 | 69.15 | 70.65 |
| 64.50 | 65.82 | 66.50 | 67.19 | 68.62 | 70.11 |
| 64.00 | 65.31 | 65.98 | 66.67 | 68.09 | 69.57 |
| 63.50 | 64.80 | 65.46 | 66.15 | 67.55 | 69.02 |
| 63.00 | 64.29 | 64.95 | 65.63 | 67.02 | 68.48 |
| 62.50 | 63.78 | 64.43 | 65.10 | 66.49 | 67.93 |
| 62.00 | 63.27 | 63.92 | 64.58 | 65.96 | 67.39 |
| 61.50 | 62.76 | 63.40 | 64.06 | 65.43 | 66.85 |
| 61.00 | 62.25 | 62.89 | 63.54 | 64.89 | 66.31 |
| 60.50 | 61.73 | 62.37 | 63.02 | 64.36 | 65.76 |
| 60.00 | 61.22 | 61.86 | 62.50 | 63.83 | 65.22 |
| 59.50 | 60.71 | 61.34 | 61.98 | 63.30 | 64.67 |
| 59.00 | 60.20 | 60.83 | 61.46 | 62.77 | 64.13 |
| 58.50 | 59.69 | 60.31 | 60.94 | 62.23 | 63.59 |
| 58.00 | 59.18 | 59.79 | 60.42 | 61.70 | 63.04 |
| 57.50 | 58.67 | 59.28 | 59.90 | 61.17 | 62.50 |
| 57.00 | 58.16 | 58.76 | 59.38 | 60.64 | 61.96 |
| 56.50 | 57.65 | 58.25 | 58.85 | 60.11 | 61.41 |
| 56.00 | 57.14 | 57.73 | 58.33 | 59.58 | 60.87 |
| 55.50 | 56.63 | 57.22 | 57.81 | 59.04 | 60.33 |
| 55.00 | 56.12 | 56.70 | 57.29 | 58.51 | 59.78 |
| 54.50 | 55.61 | 56.19 | 56.77 | 57.98 | 59.24 |

| <u>Asking</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|---------------|-----------|-----------|-----------|-----------|-----------|
| 54.00 | 55.10 | 55.67 | 56.25 | 57.45 | 58.70 |
| 53.50 | 54.59 | 55.15 | 55.73 | 56.91 | 58.15 |
| 53.00 | 54.08 | 54.64 | 55.21 | 56.38 | 57.61 |
| 52.50 | 53.57 | 54.12 | 54.69 | 55.85 | 57.07 |
| 52.00 | 53.06 | 53.61 | 54.17 | 55.32 | 56.52 |
| 51.50 | 52.55 | 53.09 | 53.65 | 54.79 | 55.98 |
| 51.00 | 52.04 | 52.58 | 53.13 | 54.26 | 55.44 |
| 50.50 | 51.53 | 52.06 | 52.60 | 53.72 | 54.89 |
| 50.00 | 51.02 | 51.55 | 52.08 | 53.19 | 54.35 |
| 49.50 | 50.51 | 51.03 | 51.56 | 52.66 | 53.80 |
| 49.00 | 50.00 | 50.52 | 51.04 | 52.13 | 53.26 |
| 48.50 | 49.49 | 50.00 | 50.52 | 51.60 | 52.72 |
| 48.00 | 48.98 | 49.49 | 50.00 | 51.07 | 52.17 |
| 47.50 | 48.47 | 48.97 | 49.48 | 50.53 | 51.63 |
| 47.00 | 47.96 | 48.45 | 48.96 | 50.00 | 51.09 |
| 46.50 | 47.45 | 47.94 | 48.44 | 49.47 | 50.54 |
| 46.00 | 46.94 | 47.42 | 47.92 | 48.94 | 50.00 |
| 45.50 | 46.43 | 46.91 | 47.40 | 48.40 | 49.46 |
| 45.00 | 45.92 | 46.39 | 46.88 | 47.87 | 48.91 |
| 44.50 | 45.41 | 45.88 | 46.35 | 47.34 | 48.37 |
| 44.00 | 44.90 | 45.36 | 45.83 | 46.81 | 47.83 |
| 43.50 | 44.39 | 44.85 | 45.31 | 46.28 | 47.28 |
| 43.00 | 43.88 | 44.33 | 44.79 | 45.75 | 46.74 |
| 42.50 | 43.37 | 43.81 | 44.27 | 45.21 | 46.20 |
| 42.00 | 42.86 | 43.30 | 43.75 | 44.68 | 45.65 |
| 41.50 | 42.35 | 42.78 | 43.23 | 44.15 | 45.11 |
| 41.00 | 41.84 | 42.27 | 42.71 | 43.62 | 44.57 |
| 40.50 | 41.33 | 41.75 | 42.19 | 43.09 | 44.02 |
| 40.00 | 40.82 | 41.24 | 41.67 | 42.55 | 43.48 |
| 39.50 | 40.31 | 40.72 | 41.15 | 42.02 | 42.93 |
| 39.00 | 39.80 | 40.21 | 40.63 | 41.49 | 42.39 |
| 38.50 | 39.29 | 39.69 | 40.10 | 40.96 | 41.85 |
| 38.00 | 38.78 | 39.18 | 39.58 | 40.43 | 41.30 |
| 37.50 | 38.27 | 38.66 | 39.06 | 39.89 | 40.76 |
| 37.00 | 37.76 | 38.14 | 38.54 | 39.36 | 40.22 |
| 36.50 | 37.24 | 37.63 | 38.02 | 38.83 | 39.67 |

| <u>Asking</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|---------------|-----------|-----------|-----------|-----------|-----------|
| 36.00 | 36.73 | 37.11 | 37.50 | 38.03 | 39.13 |
| 35.50 | 36.22 | 36.60 | 36.98 | 37.77 | 38.59 |
| 35.00 | 35.71 | 36.08 | 36.46 | 37.23 | 38.04 |
| 34.50 | 35.20 | 35.57 | 35.94 | 36.70 | 37.50 |
| 34.00 | 34.69 | 35.05 | 35.42 | 36.17 | 36.96 |
| 33.50 | 34.18 | 34.54 | 34.90 | 35.64 | 36.41 |
| 33.00 | 33.67 | 34.02 | 34.37 | 35.11 | 35.87 |
| 32.50 | 33.16 | 33.51 | 33.85 | 34.57 | 35.33 |
| 32.00 | 32.66 | 32.99 | 33.33 | 34.04 | 34.78 |
| 31.50 | 32.14 | 32.47 | 32.81 | 33.51 | 34.24 |
| 31.00 | 31.63 | 31.96 | 32.29 | 32.98 | 33.70 |
| 30.50 | 31.12 | 31.44 | 31.77 | 32.45 | 33.15 |
| 30.00 | 30.61 | 30.93 | 31.25 | 31.91 | 32.61 |
| 29.50 | 30.10 | 30.41 | 30.73 | 31.38 | 32.07 |
| 29.00 | 29.59 | 29.88 | 30.21 | 30.85 | 31.52 |
| 28.50 | 29.08 | 29.38 | 29.69 | 30.32 | 30.98 |
| 28.00 | 28.57 | 28.87 | 29.17 | 29.79 | 30.43 |
| 27.50 | 28.06 | 28.35 | 28.65 | 29.26 | 29.89 |
| 27.00 | 27.55 | 27.84 | 28.12 | 28.72 | 29.35 |
| 26.50 | 27.04 | 27.32 | 27.60 | 28.19 | 28.80 |
| 26.00 | 26.53 | 26.80 | 27.08 | 27.66 | 28.26 |
| 25.50 | 26.02 | 26.29 | 26.56 | 27.13 | 27.72 |
| 25.00 | 25.51 | 25.77 | 26.04 | 26.60 | 27.17 |
| 24.50 | 25.00 | 25.26 | 25.52 | 26.06 | 26.63 |
| 24.00 | 24.49 | 24.74 | 25.00 | 25.53 | 26.09 |
| 23.50 | 23.98 | 24.23 | 24.48 | 25.00 | 25.54 |
| 23.00 | 23.47 | 23.71 | 23.96 | 24.47 | 25.00 |
| 22.50 | 22.96 | 23.20 | 23.44 | 23.94 | 24.46 |
| 22.00 | 22.45 | 22.68 | 22.92 | 23.40 | 23.91 |
| 21.50 | 21.94 | 22.16 | 22.40 | 22.87 | 23.37 |
| 21.00 | 21.43 | 21.65 | 21.87 | 22.34 | 22.83 |
| 20.50 | 20.92 | 21.13 | 21.35 | 21.81 | 22.28 |
| 20.00 | 20.41 | 20.62 | 20.83 | 21.28 | 21.74 |
| 19.50 | 19.90 | 20.10 | 20.31 | 20.74 | 21.20 |
| 19.00 | 19.39 | 19.59 | 19.79 | 20.21 | 20.65 |
| 18.50 | 18.88 | 19.07 | 19.27 | 19.68 | 20.11 |

| <u>Asking</u> | <u>2%</u> | <u>3%</u> | <u>4%</u> | <u>6%</u> | <u>8%</u> |
|---------------|-----------|-----------|-----------|-----------|-----------|
| 18.00 | 18.37 | 18.56 | 18.75 | 19.15 | 19.57 |
| 17.50 | 17.86 | 18.04 | 18.23 | 18.62 | 19.02 |
| 17.00 | 17.35 | 17.53 | 17.71 | 18.09 | 18.48 |
| 16.50 | 16.84 | 17.01 | 17.19 | 17.55 | 17.93 |
| 16.00 | 16.33 | 16.49 | 16.67 | 17.02 | 17.39 |
| 15.50 | 15.82 | 15.98 | 16.15 | 16.49 | 16.85 |
| 15.00 | 15.31 | 15.46 | 15.63 | 15.96 | 16.30 |



BEEF CARCASS DATA SERVICE

For several years, USDA has offered a service—Beef Carcass Evaluation Service—to assist producers in obtaining carcass data on quality and yield grade factors. Several breed associations, university experiment stations, feed manufacturing companies, and numerous commercial and purebred producers—have used this service regularly. However, its use by and benefits to the individual producer have been limited. Therefore, USDA introduced a new service—Beef Carcass Data Service—which will be easier to use and more readily available to a large segment of the livestock and meat industry.

Beef Carcass Data Service is a joint USDA-beef cattle industry cooperative effort to help cattle producers and feeders obtain data on important value-determining characteristics of the carcasses their cattle produce.

This service, conducted in cooperation with participating cattle producer and feeder associations, agricultural organizations, and state departments of agriculture, simplifies USDA's Beef Carcass Evaluation Service and is designed to provide carcass data to persons who may not own the carcass but who were financially interested in the live animal at some point during its development.

Beef Carcass Data Service works simply and conveniently. Specially designed eartags used for official identification in this program can be purchased from one of the cooperating sources. Producers and feeders can attach numbered eartags to those cattle on which they want to obtain carcass information.

When eartagged cattle are slaughtered, a meat inspector will remove the tag from the ear, attach it to the carcass, and notify the USDA meat grader assigned to the plant.

After the tagged carcasses have been sufficiently chilled, the meat grader evaluates quality and yield grade factors and records this carcass data, together with the eartag serial number and slaughter date, on a special carcass data form. The completed data forms are forwarded to the Carcass Data Center in Washington, D.C. The Carcass Data Center will process the data and mail it to the "cooperator" who, in turn, will send it to the eartag owner. Eartag owners will be billed for each completed data form received.

Persons planning to use the Carcass Data

Service should realize that purchase of an eartag does not guarantee that carcass data will be received on every animal identified. Eartags may be lost—either before or during the slaughtering process—or removed at any time during the production, feeding, and marketing processes. When this happens, positive identification from live animal to carcass—the key to the Carcass Data Service—is lost and data cannot be collected. However, the minimal cost of eartags, plus the fact that the charge for the service is not made until the completed data form is received, makes the financial risk of losing eartags negligible.

Feeder calf producers should keep in mind that most cattle today are slaughtered at 16 to 24 months of age. Thus, the calf producer may not receive the eartag carcass report for several months after he sells the animal. Feedlot operators who tag animals will receive the report in a short period of time after sale of the animal.

Beef Carcass Data Service will provide producers with the following carcass data:

1. Maturity
2. Degree of marbling
3. Quality grade
4. Fat thickness (tenths of inches)
5. Ribeye area (square inches)
6. Kidney, pelvic, and heart fat (percent)
7. Hot carcass weight
8. Yield grade

Beef Carcass Data Service can be obtained

by ordering official eartags from organizations, associations, and some state departments of agriculture which have indicated a desire to be participating cooperators. They will issue eartags to the extent of their available supply. Eartags cannot be obtained directly from the Carcass Data Center. For information on sources of eartags, contact:

Meat Quality Division
Food Safety and Quality Service
U.S. Department of Agriculture
Washington, D.C. 20250

Beef Carcass Data Service costs:

\$.50—for each eartag

\$.75—for a tool for attaching the tag
(you need only one)

\$1.50—for each completed carcass data
report

Beef Carcass Data Service can help by making a substantial contribution toward improving the genetic potential of breeding stock and improving feeding programs and management practices. The detailed carcass data obtained through this program can provide important guidelines in the production of high quality, meat-type cattle—those that combine thick muscling and a minimum of excess fat.

GLOSSARY OF LIVESTOCK MARKET NEWS TERMS

MARKET—A term with several meanings:

A geographic location where a commodity is traded.
The price, or price level, at which a commodity is traded.

To sell (verb).

MARKET ACTIVITY—The pace at which sales are being made.

ACTIVE—Available supplies (offerings) are readily clearing the market.

MODERATE—Available supplies (offerings) are clearing the market at a reasonable rate.

SLOW—Available supplies (offerings) are not readily clearing the market.

INACTIVE—Sales are intermittent with few buyers or sellers.

PRICE TREND—The direction in which prices are moving in relation to trading in the previous reporting period(s).

HIGHER—The majority of sales are at prices measurably higher than the previous trading session.

FIRM—Prices are tending higher, but not measurably so.

STEADY—Prices are unchanged from previous trading session.

WEAK—Prices are tending lower, but not measurably so.

LOWER—Prices for most sales are measurably lower than the previous trading session.

SUPPLY/OFFERING—The quantity of a particular item available for current trading.

HEAVY—When the volume of supplies is above average for the market being reported.

MODERATE—When volume of supplies is average for the market being reported.

LIGHT—When the volume of supplies is below average for the market being reported.

DEMAND—The desire to possess a commodity coupled with the willingness and ability to pay.

VERY GOOD—Offerings or supplies are rapidly absorbed.

GOOD—Firm confidence on the part of buyers that general market conditions are good. Trading is more active than normal.

MODERATE—Average buyer interest and trading.

LIGHT—Demand is below average.

VERY LIGHT—Few buyers are interested in trading.

MOSTLY—The majority of sales or volume.

UNDERTONE—Situation or sense of direction in an unsettled market situation.

Prepared By

MARKET NEWS

LIVESTOCK
MEAT
WOOL

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN, AND SEED DIVISION